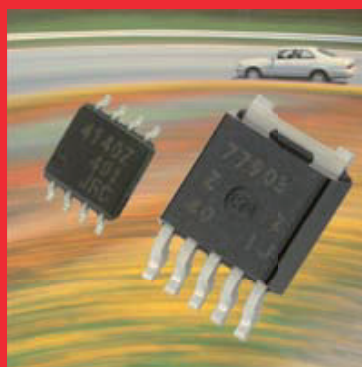
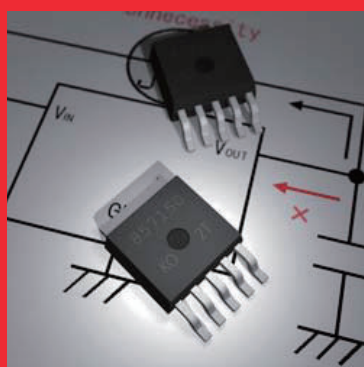
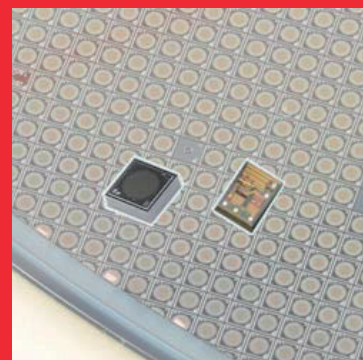


Electronic Devices Selection Guides

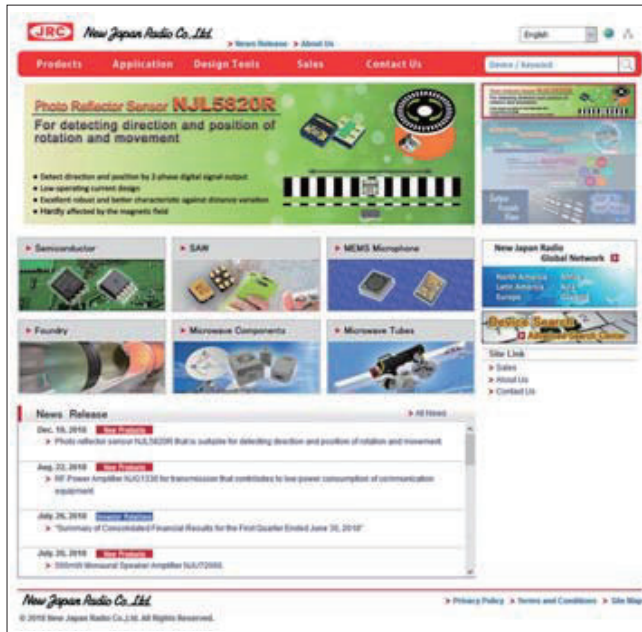
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Products	Contained materials
GaAs MMICs	Gallium(Ga) and Arsenic(As)
Photo Reflectors	Gallium(Ga) and Arsenic(As)
SAW Filters	Nickel (Ni), Cobalt (C)
8. The product specifications and descriptions listed in this catalog are subject to change at any time, without notice

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New Products Line-up

Website: <https://www.njr.com/>

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NJU77551	1.7MHz, 50μA/ch, Excellent EMI Immunity, Rail-to-Rail Input/Output, Operational Amplifier (Single)	3, 11
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Operational Amplifiers & Comparators

Rail to Rail Input/Output Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM2730	1	Single	1.8 to 5	0.32	5	50	5	0.4	1	1.5		10	SOT-23-5	
NJM2732	2	Single	1.8 to 6	0.29	5	50	5	0.4	1	1		10	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJM2734	4	Single	1.8 to 6	0.3	5	50	5	0.4	1	1		10	DIP14 DMP14 SSOP14 PCSP20-CC	
NJM2737	2	Single	1.8 to 6	0.6	5	200	5	0.7	3.1	2		5	DIP8 DMP8 SSOP8 MSOP8(TVSP8)	
NJM8530	1	Single	1.8 to 14	0.32	4	50	5	0.4	1	1		10	SOT-23-5	
NJM8532	2	Single	1.8 to 14	0.29	4	50	5	0.35	1	1		10	MSOP8(TVSP8) DMP8 SSOP8	
NJM8534	4	Single	1.8 to 14	0.3	4	50	5	0.3	1	1		10	SSOP14	
NJU7040	1	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.85	0.8	0.8		40	SOT-23-5	
NJU7042	1	Single	2.7 to 5.5	0.015	5	0.001	0.001	0.03		0.047			SOT-23-5	
NJU7043	2	Single	1.8 to 5.5	0.3	10	0.001	0.001	0.7	0.8	0.8		40	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJU7044	4	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.8	0.8	0.8		40	DIP14 DMP14 SSOP14	
NJU7046	1	Single	2.7 to 5.5	1.4	5	0.001	0.001	9	5	4		20	SOT-23-5 SC-88A	
NJU7047	2	Single	2.7 to 5.5	1.35	5	0.001	0.001	9	5	4		20	SOP8 JEDEC 150mil MSOP8(TVSP8) DFN8-U1	
NJU7048	4	Single	2.7 to 5.5	1.325	5	0.001	0.001	9	5	4		20	SOP14 SSOP14	
NJU77000	1	Single	1.5 to 5.5	0.00029	1.8	0.001	0.001	0.0008	0.0011	0.0011		600	SOT-23-5	Ultra-Low Operating Current
NJU77001	1	Single	1.5 to 5.5	0.00029	1.8	0.001	0.001	0.0008	0.0011	0.0011		600	SOT-23-5 SC-88A	Ultra-Low Operating Current
NJU77002	2	Single	1.5 to 5.5	0.00023	2	0.001	0.001	0.0007	0.001	0.001		700	SOP8 JEDEC 150mil MSOP8(TVSP8) DFN8-U1	Ultra-Low Operating Current
NJU77004	4	Single	1.5 to 5.5	0.00023	2.2	0.001	0.001	0.0007	0.001	0.001		700	SSOP14	Ultra-Low Operating Current
NJU77550	1	Single	1.8 to 5.5	0.055	5	0.001	0.001	0.8	1.7			24	SOT-23-5 SC-88A	
NJU77551	1	Single	1.8 to 5.5	0.055	5	0.001	0.001	0.8	1.7			24	SOT-23-5 SC-88A	
NJU77552	2	Single	1.8 to 5.5	0.05	5	0.001	0.001	0.8	1.7			24	SOP8 MSOP8(TVSP8)	
NJU77554	4	Single	1.8 to 5.5	0.05	5	0.001	0.001	0.8	1.7			24	SSOP14	
NJU77701	1	Single	2.4 to 5.5	3.8	1.5	0.001	0.001	35	34			6	SOT-23-5	
NJU77902	2	Single	6 to 18	3.5	10	0.001	0.001	9		3		80	DFN8-W2	High Output Current
NJU77903	1	Single	6.8 to 36	9.5	6	0.001	0.001	3.5		1.5		50	TO-252-5-L3 DFN8-W2	High Output Current

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Rail to Rail Output Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _N	en		
NJM2730	1	Single	1.8 to 5	0.32	5	50	5	0.4	1	1.5		10	SOT-23-5	
NJM2732	2	Single	1.8 to 6	0.29	5	50	5	0.4	1	1		10	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJM2734	4	Single	1.8 to 6	0.3	5	50	5	0.4	1	1		10	DIP14 DMP14 SSOP14 PCSP20-CC	
NJM2737	2	Single	1.8 to 6	0.6	5	200	5	0.7	3.1	2		5	DIP8 DMP8 SSOP8 MSOP8(TVSP8)	
NJM2741	1	Single	2.5 to 14	2.2	6	100	5	3.5	10	10		10	SC-88A SOT-23-5	
NJM2746	2	Single	2.5 to 14	2	6	100	5	3.5	10	10		10	DMP8 SOP8 JEDEC 150mil DFN8-U1 SSOP8 MSOP8(TVSP8)	
NJM2747	4	Single	2.5 to 14	2	6	100	5	3.5	10	10		10	DIP14 DMP14 PCSP20-CC SSOP14	
NJM8202	2	Single	2.5 to 14	2	6	100	5	3.5	10	10		10	DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJM8524	4	Single	3 to 36	0.025	1.8	3	0.5	0.04	0.1	0.1		60	SSOP14	
NJU7007	1	Single	1 to 5.5	0.015	4	0.001	0.001	0.1		0.2			SC-88A	
NJU7008	1	Single	1 to 5.5	0.2	4	0.001	0.001	2.4		1			SC-88A	
NJU7009	1	Single	2.2 to 5.5	0.45	5	0.001	0.001	1	3.5	3	1.7	13	SC-88A	
NJU7026	1	Single	1.8 to 5.5	0.013	4	0.001	0.001	0.05	0.16	0.16		50	SC-88A SOT-23-5	
NJU7027	2	Single	1.8 to 5.5	0.013	4	0.001	0.001	0.05	0.16	0.16		50	DFN8-U1 MSOP8(TVSP8)	
NJU7028	4	Single	1.8 to 5.5	0.012	4	0.001	0.001	0.05	0.16	0.16		50	SSOP14	
NJU7029	2	Single	2.2 to 5.5	0.425	5	0.001	0.001	1	3.5	3	1.7	13	DFN8-U1 SSOP8 MSOP8(TVSP8)	
NJU7036	2	Single	2.7 to 5.5	1.75	10	0.001	0.001	0.7	0.4	0.4		60	PCSP20-E3	
NJU7040	1	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.85	0.8	0.8		40	SOT-23-5	
NJU7042	1	Single	2.7 to 5.5	0.015	5	0.001	0.001	0.03		0.047			SOT-23-5	
NJU7043	2	Single	1.8 to 5.5	0.3	10	0.001	0.001	0.7	0.8	0.8		40	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJU7044	4	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.8	0.8	0.8		40	DIP14 DMP14 SSOP14	
NJU7056	1	Single	1.8 to 5.5	0.26	4	0.001	0.001	0.8	2.1	2		15	SC-88A SOT-23-5	
NJU7057	2	Single	1.8 to 5.5	0.26	4	0.001	0.001	0.8	2.1	2		15	DFN8-U1 MSOP8(TVSP8)	
NJU7058	4	Single	1.8 to 5.5	0.25	4	0.001	0.001	0.8	2.1	2		15	SSOP14	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Rail to Rail Output Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _N	en		
NJU7067	2	Single	4 to 16	0.014	4	0.001	0.001	0.04	0.06			45	DMP8 SSOP8	
NJU7068	4	Single	4 to 16	0.014	4	0.001	0.001	0.04	0.06			45	DMP14 SSOP14	
NJU7076B	1	Single	2.2 to 5.5	0.6	0.3	0.001	0.001	0.5	1.3	1.3		10	SC-88A	
NJU77806	1	Single	1.8 to 5.5	0.5	2	0.001	0.001	1.1	4.4	2.4		5.5	SC-88A	

Precision Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _N	en		
NJM2729	1	Dual	±3 to ±18	1.6	0.06	1.2	0.3	0.3		1.1	0.08	8	SOP8 JEDEC 150mil	
NJM2739	2	Dual	±3 to ±18	1.3	0.06	1.2	0.3	0.3		1.1	0.08	8	SOP8 JEDEC 150mil	
NJM2748	1	Dual	±6 to ±16	2	2	0.05	0.025	13	2.2	2	2.5	20	DIP8 DMP8	
NJM2748A	1	Dual	±6 to ±16	2	2	0.05	0.025	13	2.2	2	2.5	20	DIP8 DMP8	
NJM2749	2	Dual	±6 to ±16	1.9	2.5	0.05	0.025	13	2.2	2	2.5	20	DMP8 SOP8 JEDEC 150mil	
NJM2749A	2	Dual	±6 to ±16	1.9	2.5	0.05	0.025	13	2.2	2	2.5	20	DIP8 DMP8 SOP8 JEDEC 150mil	
NJM8502	2	Dual	±4.5 to ±16	1.3	0.4	0.025	0.006	20	7	7	0.18	10	MSOP8(VSP8)	
NJM8512	2	Dual	±4.5 to ±16	1.3	0.4	0.025	0.006	20	7	7		10	MSOP8(VSP8) SOP8 JEDEC 150mil	
NJM8513	4	Dual	±4.5 to ±16	1.3	0.4	0.025	0.006	20	7	7		10	SSOP14	
NJMOP177	1	Dual	±3 to ±18	1.6	0.06	1.2	0.3	0.3	1.1	1.1	0.08	8	SOP8 JEDEC 150mil	
NJMOP1772	2	Dual	±3 to ±18	1.3	0.06	1.2	0.3	0.3	1.1	1.1	0.08	8	SOP8 JEDEC 150mil	
NJMOP277	1	Dual	±2.25 to ±18	0.76	0.05	0.5	0.5	0.7	1	1	0.07	8	SOP8 JEDEC 150mil MSOP8(VSP8)	RF-Immunity
NJMOP2277	2	Dual	±2.25 to ±18	0.76	0.05	0.5	0.5	0.7	1	1	0.07	8	SOP8 JEDEC 150mil MSOP8(VSP8) DFN8-W2	RF-Immunity
NJU7051	1	Single	1 to 16	0.015	2	0.001	0.001	0.05		0.1			DMP8 SSOP8	
NJU7052	2	Single	1 to 16	0.015	2	0.001	0.001	0.05		0.1			DMP8	
NJU7061	1	Single	3 to 16	0.15	2	0.001	0.001	0.4	0.35	0.4		27	DIP8 DMP8 SSOP8	
NJU7062	2	Single	3 to 16	0.15	2	0.001	0.001	0.4	0.35	0.4		27	DIP8 DMP8	
NJU7064	4	Single	3 to 16	0.15	2	0.001	0.001	0.4	0.35	0.4		27	DIP14 DMP14 SSOP14	
NJU7071	1	Single	5 to 16	0.6	2	0.001	0.001	1.1		1			DIP8 DMP8 SSOP8	
NJU7072	2	Single	5 to 16	0.6	2	0.001	0.001	1.1		1			DIP8 DMP8	
NJU7074	4	Single	5 to 16	0.6	2	0.001	0.001	1.1		1			DMP14 SSOP14	
NJU7076	1	Single	2.2 to 5.5	0.6	0.15	0.001	0.001	0.5	1.3	1.3		10	SOT-23-5	
NJU7076B	1	Single	2.2 to 5.5	0.6	0.3	0.001	0.001	0.5	1.3	1.3		10	SC-88A	
NJU7077	2	Single	2.2 to 5.5	0.6	0.15	0.001	0.001	0.5	1.3	1.3		10	MSOP8(VSP8)	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Precision Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _N	en		
NJU7078	4	Single	2.2 to 5.5	0.6	0.15	0.001	0.001	0.5	1.3	1.3		10	SSOP14	
NJU7091A	1	Single	1 to 5.5	0.015	2	0.001	0.001	0.1	0.19	0.2			SOT-23-5	
NJU7092A	1	Single	1 to 5.5	0.08	2	0.001	0.001	1	1	1			SOT-23-5	
NJU7093A	1	Single	1 to 5.5	0.2	2	0.001	0.001	2.4	1	1			SOT-23-5	
NJU7098A	1	Single	3 to 10	0.55	0.015	0.015		3	2			120	SOT-23-6-1	

Hi-Speed/Wide Band Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _N	en		
NJM2136	1	Dual	±1.35 to ±6	0.63	5	500	20	45	200	40			DMP8 SSOP8	
NJM2137	2	Dual	±1.35 to ±6	0.57	5	500	20	45	200	40			DIP8 DMP8 SSOP8	
NJM2710	6	Dual	±2 to ±4.5	1.9	7	2000	350	260	1000	180		6.8	DMP20 SSOP20	
NJM2711	1	Dual	±2 to ±4.5	1.9	7	2000	350	260	1000	180		6.8	SOT-23-5	
NJM2712	2	Dual	±2 to ±4.5	1.9	7	2000	350	260	1000	180		6.8	DMP8 MSOP8(TVSP8)	
NJM2716	1	Single	2.7 to 12	4.2	10	1000	200	40	25	30			SOT-23-5	
NJM2717	2	Single	2.7 to 12	4	11	2000	200	40	25	20			DIP8 DMP8 SSOP8 MSOP8(TVSP8)	
NJM2719	2	Dual	±2.25 to ±5	7	9	2900	200	60	90	100		3	SSOP8 MSOP8(TVSP8)	
NJM2723	1	Dual	±3.5 to ±17.5	2.9	20	2000		2000		100		6	DIP8 SOP8 JEDEC 150mil	Current Feedback Type
NJM2742	2	Single	3 to 32	2.15	12	80	5	10	2	2		40	DIP8 DMP8 SSOP8 MSOP8(TVSP8)	
NJM2744	4	Single	3 to 32	1.875	12	80	5	10	2	2		40	DIP14 DMP14 SSOP14	
NJM3472	2	Single	3 to 36	2	5.5	80	5	10	3	3.6		48	SOP8 SSOP8 MSOP8(VSP8)	
NJM3474	2	Single	3 to 36	2	5.5	80	5	10	3	3.6		48	SOP14 SSOP14	
NJM842	2	Single	3 to 36	2.15	3.5	120	6	8.5	3.5	3.5		32	SOP8 SSOP8 MSOP8(VSP8)	
NJM844	4	Single	3 to 36	2.2	3.5	120	6	8.5	3.5			32	SOP14 SSOP14	
NJU7046	1	Single	2.7 to 5.5	1.4	5	0.001	0.001	9	5	4		20	SOT-23-5 SC-88A	
NJU7047	2	Single	2.7 to 5.5	1.35	5	0.001	0.001	9	5	4		20	SOP8 JEDEC 150mil MSOP8(TVSP8) DFN8-U1	
NJU7048	4	Single	2.7 to 5.5	1.325	5	0.001	0.001	9	5	4		20	SOP14 SSOP14	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Low Noise Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _{IO} [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _T [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	e _n		
NJM14558	2	Dual	±2 to ±7	1.35	3	70	5	2.5	5	4	1.4	10	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(VSP8)	
NJM2058	4	Dual	±4 to ±18	1.75	6	20	5	1		5	1.4	14	DIP14 DMP14 SSOP14	
NJM2059	4	Dual	±4 to ±18	1.75	6	20	5	2	6.8	8	1.4	14	DIP14 DMP14 SSOP14	
NJM2060	4	Dual	±4 to ±18	2.25	6	40	5	4	10	10	1.2	10	DIP14 DMP14 SSOP14	
NJM2068	2	Dual	±4 to ±18	2.5	3	150	5	6	24	5.5	0.44	4	DIP8 DMP8 SIP8 SSOP8	
NJM2122	2	Dual	±2 to ±7	3.5	6	3600	450	2.4	12		0.56	1.5	DIP8 DMP8	
NJM2730	1	Single	1.8 to 5	0.32	5	50	5	0.4	1	1.5		10	SOT-23-5	
NJM2732	2	Single	1.8 to 6	0.29	5	50	5	0.4	1	1		10	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJM2734	4	Single	1.8 to 6	0.3	5	50	5	0.4	1	1		10	DIP14 DMP14 SSOP14 PCSP20-CC	
NJM2737	2	Single	1.8 to 6	0.6	5	200	5	0.7	3.1	2		5	DIP8 DMP8 SSOP8 MSOP8(TVSP8)	
NJM2741	1	Single	2.5 to 14	2.2	6	100	5	3.5	10	10		10	SC-88A SOT-23-5	
NJM2745	4	Dual	±2 to ±15.5	3.25	3	100	5	5	15	5		5	DMP14 SSOP14	
NJM2746	2	Single	2.5 to 14	2	6	100	5	3.5	10	10		10	DMP8 SOP8 JEDEC 150mil DFN8-U1 SSOP8 MSOP8(TVSP8)	
NJM2747	4	Single	2.5 to 14	2	6	100	5	3.5	10	10		10	DIP14 DMP14 PCSP20-CC SSOP14	
NJM4556A	2	Dual	±2 to ±18	4.5	6	50	5	3	8	4		12	DIP8 DMP8 SIP8 SSOP8	
NJM4558	2	Dual	±4 to ±18	1.75	6	25	5	1	3	3	1.4	12.5	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8	
NJM4558C	2	Dual	±4 to ±18	1.75	6	25	5	1.5	3.5	3	1.4	12	SOP8 SSOP8	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Low Noise Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM4565	2	Dual	±4 to ±18	2.25	3	50	2	4	10	5	1.2	9	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8	
NJM4580	2	Dual	±2 to ±18	3	3	100	5	5	15	5	0.8	5	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(VSP8)	
NJM4580C	2	Dual	±4 to ±18	3	3	100	5	5	15	4	0.8	5	SOP8 SSOP8	
NJM4585	2	Dual	±4 to ±18	2.5	3	260	5	6.8	19	7.5	0.5	3.5	DMP8	
NJM5532	2	Dual	±3 to ±22	4.5	4	200	10	8	10	8	0.5	5	DIP8 DMP8 SIP8	
NJM5532C	2	Dual	±3 to ±22	4.5	4	200	10	9	10		0.6	5	SOP8	
NJM8065	2	Dual	±4 to ±18	2.25	3	50	2	4	10	4		8	SOP8 DMP8 MSOP8(TVSP8) SSOP8	Wide temperature range (-40°C to +125°C)
NJM8068	2	Dual	±4 to ±18	2.5	3	260	5	6.8	19	7.5	0.5	3.5	SOP8 MSOP8(TVSP8)	Wide temperature range (-40°C to +125°C)
NJM8080	2	Dual	±2 to ±18	3	3	100	5	5	15	5		5	SOP8 MSOP8(TVSP8) SSOP8	Wide temperature range (-40°C to +125°C)
NJM8502	2	Dual	±4.5 to ±16	1.3	0.4	0.025	0.006	20	7	7	0.18	10	MSOP8(VSP8)	
NJM8512	2	Dual	±4.5 to ±16	1.3	0.4	0.025	0.006	20	7	7		10	MSOP8(VSP8) SOP8 JEDEC 150mil	
NJM8513	4	Dual	±4.5 to ±16	1.3	0.4	0.025	0.006	20	7	7		10	SSOP14	
NJU7009	1	Single	2.2 to 5.5	0.45	5	0.001	0.001	1	3.5	3	1.7	13	SC-88A	
NJU7056	1	Single	1.8 to 5.5	0.26	4	0.001	0.001	0.8	2.1	2		15	SC-88A SOT-23-5	
NJU7057	2	Single	1.8 to 5.5	0.26	4	0.001	0.001	0.8	2.1	2		15	DFN8-U1 MSOP8(TVSP8)	
NJU7058	4	Single	1.8 to 5.5	0.25	4	0.001	0.001	0.8	2.1	2		15	SSOP14	
NJU7076	1	Single	2.2 to 5.5	0.6	0.15	0.001	0.001	0.5	1.3	1.3		10	SOT-23-5	
NJU7076B	1	Single	2.2 to 5.5	0.6	0.3	0.001	0.001	0.5	1.3	1.3		10	SC-88A	
NJU7077	2	Single	2.2 to 5.5	0.6	0.15	0.001	0.001	0.5	1.3	1.3		10	MSOP8(VSP8)	
NJU7078	4	Single	2.2 to 5.5	0.6	0.15	0.001	0.001	0.5	1.3	1.3		10	SSOP14	
NJU77806	1	Single	1.8 to 5.5	0.5	2	0.001	0.001	1.1	4.4	2.4		5.5	SC-88A	

Special Function Amplifiers for Audio

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM2121	1	Dual	±2.5 to ±18	2.3	6	200		4		14	2	14	DIP8 DMP8	High Speed Operational Amplifier with Switch High Quality Sound, NJM4560 Comparable

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Low Operating Current Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM062C	2	Dual	±2 to ±18	0.2	15	0.03	0.005	3.5		1		35	SOP8	
NJM064C	4	Dual	±2 to ±18	0.2	15	0.03	0.005	3.5		1		35	SOP14	
NJM12904	2	Single	2 to 14	0.35	5	20	5	0.7	1.5	1			DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJM2132	2	Single	2.7 to 32	0.22	4.5	20	5	2.1	1.8	1.5		32	DIP8 DMP8 SSOP8	
NJM2730	1	Single	1.8 to 5	0.32	5	50	5	0.4	1	1.5		10	SOT-23-5	
NJM2732	2	Single	1.8 to 6	0.29	5	50	5	0.4	1	1		10	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJM2734	4	Single	1.8 to 6	0.3	5	50	5	0.4	1	1		10	DIP14 DMP14 SSOP14 PCSP20-CC	
NJM2737	2	Single	1.8 to 6	0.6	5	200	5	0.7	3.1	2		5	DIP8 DMP8 SSOP8 MSOP8(TVSP8)	
NJM2902C	4	Single	3 to 32	0.3	7	20	2	0.6	1.3	1		30	SOP14 SSOP14	Wide temperature range (-40°C to +125°C)
NJM2902CA	4	Single	3 to 32	0.3	2.5	20	2	0.6	1.3	1		30	SOP14 SSOP14	Wide temperature range (-40°C to +125°C)
NJM2904	2	Single	3 to 32	0.35	7	25	5	0.5	0.6	0.5			DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJM2904C	2	Single	3 to 32	0.35	7	20	2	0.6	1.1	0.5		30	SOP8 DMP8 MSOP8(TVSP8) SSOP8 EQFN12-E2	Wide temperature range (-40°C to +125°C)
NJM2904CA	2	Single	3 to 32	0.35	2	20	2	0.6	1.1	0.5		30	SOP8 DMP8 MSOP8(TVSP8) SSOP8	Wide temperature range (-40°C to +125°C)
NJM320A	1	Single	3 to 32	0.45	2.5	20	2	0.6	1.1			30	SOT-23-5 SC-88A	Dual Supply (±1.5 to ±16V)
NJM321A	1	Single	3 to 32	0.45	2.5	20	2	0.6	1.1			30	SOT-23-5 SC-88A DFN6-G1	Dual Supply (±1.5 to ±16V)
NJM324C	4	Single	3 to 30	0.3	7	20	2	0.6	1.3	1		30	SOP14 SSOP14	Dual Supply (±1.5 to ±15V)
NJM324CA	4	Single	3 to 30	0.3	2.5	20	2	0.6	1.3	1		30	SOP14 SSOP14	Dual Supply (±1.5 to ±15V)

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Low Operating Current Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM358C	2	Single	3 to 30	0.35	7	20	2	0.6	1.1	0.5		30	SOP8 SSOP8	Dual Supply (±1.5 to ±15V)
NJM358CA	2	Single	3 to 30	0.35	2	20	2	0.6	1.1	0.5		30	SOP8 SSOP8	Dual Supply (±1.5 to ±15V)
NJM8020	1	Single	3 to 36	0.45	2	20	2	0.6	1.1			30	SOT-23-5 SC-88A	Dual Supply (±1.5 to ±18V)
NJM8021	1	Single	3 to 36	0.45	2	20	2	0.6	1.1			30	SOT-23-5 SC-88A DFN6-G1	Dual Supply (±1.5 to ±18V)
NJM8524	4	Single	3 to 36	0.025	1.8	3	0.5	0.04	0.1	0.1		60	SSOP14	
NJU7001	1	Single	1 to 16	0.015	10	0.001	0.001	0.05	0.15	0.1		37.5	DIP8 DMP8 SSOP8	
NJU7002	2	Single	1 to 16	0.015	10	0.001	0.001	0.05	0.15	0.1		37.5	DIP8 DMP8	
NJU7004	4	Single	1 to 16	0.015	10	0.001	0.001	0.05	0.15	0.1		37.5	DIP14 DMP14 SSOP14	
NJU7006	1	Single	1.8 to 3.6	0.003	2	0.001	0.001	0.04		0.095			SOT-23-5	
NJU7007	1	Single	1 to 5.5	0.015	4	0.001	0.001	0.1		0.2			SC-88A	
NJU7008	1	Single	1 to 5.5	0.2	4	0.001	0.001	2.4		1			SC-88A	
NJU7011	1	Single	1 to 5.5	0.015	10	0.001	0.001	0.1	0.2	0.2			SOT-23-5	
NJU7012	1	Single	1 to 5.5	0.08	10	0.001	0.001	1	1	1			SOT-23-5	
NJU7013	1	Single	1 to 5.5	0.2	10	0.001	0.001	2.4	1	1			SOT-23-5	
NJU7014	2	Single	1 to 5.5	0.015	10	0.001	0.001	0.1	0.2	0.2			DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7015	2	Single	1 to 5.5	0.08	10	0.001	0.001	1	1	1			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7016	2	Single	1 to 5.5	0.2	10	0.001	0.001	2.4	1	1			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7019	2	Single	1 to 5.5	0.02	10	0.001	0.001	0.25		0.4			MSOP8(VSP8)	
NJU7021	1	Single	3 to 16	0.15	10	0.001	0.001	0.4	0.35	0.4		27	DMP8 SSOP8	
NJU7022	2	Single	3 to 16	0.15	10	0.001	0.001	0.4	0.35	0.4		27	DIP8 DMP8	
NJU7024	4	Single	3 to 16	0.15	10	0.001	0.001	0.4	0.35	0.4		27	DIP14 DMP14 SSOP14	
NJU7026	1	Single	1.8 to 5.5	0.013	4	0.001	0.001	0.05	0.16	0.16		50	SC-88A SOT-23-5	
NJU7027	2	Single	1.8 to 5.5	0.013	4	0.001	0.001	0.05	0.16	0.16		50	DFN8-U1 MSOP8(TVSP8)	
NJU7028	4	Single	1.8 to 5.5	0.012	4	0.001	0.001	0.05	0.16	0.16		50	SSOP14	
NJU7040	1	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.85	0.8	0.8		40	SOT-23-5	
NJU7042	1	Single	2.7 to 5.5	0.015	5	0.001	0.001	0.03		0.047			SOT-23-5	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Low Operating Current Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJU7043	2	Single	1.8 to 5.5	0.3	10	0.001	0.001	0.7	0.8	0.8		40	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJU7044	4	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.8	0.8	0.8		40	DIP14 DMP14 SSOP14	
NJU7051	1	Single	1 to 16	0.015	2	0.001	0.001	0.05		0.1			DMP8 SSOP8	
NJU7052	2	Single	1 to 16	0.015	2	0.001	0.001	0.05		0.1			DMP8	
NJU7061	1	Single	3 to 16	0.15	2	0.001	0.001	0.4	0.35	0.4		27	DIP8 DMP8 SSOP8	
NJU7062	2	Single	3 to 16	0.15	2	0.001	0.001	0.4	0.35	0.4		27	DIP8 DMP8	
NJU7064	4	Single	3 to 16	0.15	2	0.001	0.001	0.4	0.35	0.4		27	DIP14 DMP14 SSOP14	
NJU7067	2	Single	4 to 16	0.014	4	0.001	0.001	0.04	0.06			45	DMP8 SSOP8	
NJU7068	4	Single	4 to 16	0.014	4	0.001	0.001	0.04	0.06			45	DMP14 SSOP14	
NJU7091A	1	Single	1 to 5.5	0.015	2	0.001	0.001	0.1	0.19	0.2			SOT-23-5	
NJU7092A	1	Single	1 to 5.5	0.08	2	0.001	0.001	1	1	1			SOT-23-5	
NJU7093A	1	Single	1 to 5.5	0.2	2	0.001	0.001	2.4	1	1			SOT-23-5	
NJU7094	2	Single	1 to 5.5	0.015	4	0.001	0.001	0.1	0.19	0.2			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7095	2	Single	1 to 5.5	0.08	4	0.001	0.001	1	1	1			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7096	2	Single	1 to 5.5	0.2	4	0.001	0.001	2.4	1	1			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU77000	1	Single	1.5 to 5.5	0.00029	1.8	0.001	0.001	0.0008	0.0011	0.0011		600	SOT-23-5	Ultra-Low Operating Current
NJU77001	1	Single	1.5 to 5.5	0.00029	1.8	0.001	0.001	0.0008	0.0011	0.0011		600	SOT-23-5 SC-88A	Ultra-Low Operating Current
NJU77002	2	Single	1.5 to 5.5	0.00023	2	0.001	0.001	0.0007	0.001	0.001		700	SOP8 JEDEC 150mil MSOP8(TVSP8) DFN8-U1	Ultra-Low Operating Current
NJU77004	4	Single	1.5 to 5.5	0.00023	2.2	0.001	0.001	0.0007	0.001	0.001		700	SSOP14	Ultra-Low Operating Current
NJU77550	1	Single	1.8 to 5.5	0.055	5	0.001	0.001	0.8	1.7			24	SOT-23-5 SC-88A	
NJU77551	1	Single	1.8 to 5.5	0.055	5	0.001	0.001	0.8	1.7			24	SOT-23-5 SC-88A	
NJU77552	2	Single	1.8 to 5.5	0.05	5	0.001	0.001	0.8	1.7			24	SOP8 MSOP8(TVSP8)	
NJU77554	4	Single	1.8 to 5.5	0.05	5	0.001	0.001	0.8	1.7			24	SSOP14	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Low Operating Voltage Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM12902	4	Single	2 to 14	0.25	5	20	5	0.7	1.5	1			DMP14 SSOP14 PCSP14-C3	
NJM12904	2	Single	2 to 14	0.35	5	20	5	0.7	1.5	1			DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJM13403	4	Single	2 to 14	0.75	4	25	5	1.2	2	2		25	DIP14 DMP14 SSOP14	
NJM13404	2	Single	2 to 14	1	4	25	5	1.2	2	2		25	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(VSP8) MSOP8(TVSP8)	
NJM2125	1	Single	2.7 to 20	1	7	25	5	1.2	1	1.2			SOT-23-5	
NJM2132	2	Single	2.7 to 32	0.22	4.5	20	5	2.1	1.8	1.5		32	DIP8 DMP8 SSOP8	
NJM2140	2	Dual	±1 to ±7	1.75	6	100	10	4	12	12			MSOP8(TVSP8) MSOP8(VSP8)	
NJM2143	2	Single	3 to 20	0.35	7	25	5	0.5	0.6				MSOP8(TVSP8) MSOP8(VSP8)	
NJM2716	1	Single	2.7 to 12	4.2	10	1000	200	40	25	30			SOT-23-5	
NJM2717	2	Single	2.7 to 12	4	11	2000	200	40	25	20			DIP8 DMP8 SSOP8 MSOP8(TVSP8)	
NJM2730	1	Single	1.8 to 5	0.32	5	50	5	0.4	1	1.5		10	SOT-23-5	
NJM2732	2	Single	1.8 to 6	0.29	5	50	5	0.4	1	1		10	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJM2734	4	Single	1.8 to 6	0.3	5	50	5	0.4	1	1		10	DIP14 DMP14 SSOP14 PCSP20-CC	
NJM2737	2	Single	1.8 to 6	0.6	5	200	5	0.7	3.1	2		5	DIP8 DMP8 SSOP8 MSOP8(TVSP8)	
NJM2740	2	Dual	±1.1 to ±3.5	1.75	6	100	5	4	12				DMP8 SSOP8 MSOP8(TVSP8)	
NJM2741	1	Single	2.5 to 14	2.2	6	100	5	3.5	10	10		10	SC-88A SOT-23-5	
NJM2742	2	Single	3 to 32	2.15	12	80	5	10	2	2		40	DIP8 DMP8 SSOP8 MSOP8(TVSP8)	
NJM2744	4	Single	3 to 32	1.875	12	80	5	10	2	2		40	DIP14 DMP14 SSOP14	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Low Operating Voltage Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM2746	2	Single	2.5 to 14	2	6	100	5	3.5	10	10		10	DMP8 SOP8 JEDEC 150mil DFN8-U1 SSOP8 MSOP8(TVSP8)	
NJM2747	4	Single	2.5 to 14	2	6	100	5	3.5	10	10		10	DIP14 DMP14 PCSP20-CC SSOP14	
NJM2902C	4	Single	3 to 32	0.3	7	20	2	0.6	1.3	1		30	SOP14 SSOP14	Wide temperature range (-40°C to +125°C)
NJM2902CA	4	Single	3 to 32	0.3	2.5	20	2	0.6	1.3	1		30	SOP14 SSOP14	Wide temperature range (-40°C to +125°C)
NJM2904	2	Single	3 to 32	0.35	7	25	5	0.5	0.6	0.5			DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJM2904C	2	Single	3 to 32	0.35	7	20	2	0.6	1.1	0.5		30	SOP8 DMP8 MSOP8(TVSP8) SSOP8 EQFN12-E2	Wide temperature range (-40°C to +125°C)
NJM2904CA	2	Single	3 to 32	0.35	2	20	2	0.6	1.1	0.5		30	SOP8 DMP8 MSOP8(TVSP8) SSOP8	Wide temperature range (-40°C to +125°C)
NJM324C	4	Single	3 to 30	0.3	7	20	2	0.6	1.3	1		30	SOP14 SSOP14	Dual Supply (±1.5 to ±15V)
NJM324CA	4	Single	3 to 30	0.3	2.5	20	2	0.6	1.3	1		30	SOP14 SSOP14	Dual Supply (±1.5 to ±15V)
NJM3403A	4	Single	4 to 36	0.75	5	70	5	1.2	1	1.2		25	DIP14 DMP14 SSOP14	
NJM3414A	2	Single	3 to 15	2	5	100	5	1	1.3	9		18	DIP8 DMP8 SIP8 SSOP8	
NJM358C	2	Single	3 to 30	0.35	7	20	2	0.6	1.1	0.5		30	SOP8 SSOP8	Dual Supply (±1.5 to ±15V)
NJM358CA	2	Single	3 to 30	0.35	2	20	2	0.6	1.1	0.5		30	SOP8 SSOP8	Dual Supply (±1.5 to ±15V)
NJU7001	1	Single	1 to 16	0.015	10	0.001	0.001	0.05	0.15	0.1		37.5	DIP8 DMP8 SSOP8	
NJU7002	2	Single	1 to 16	0.015	10	0.001	0.001	0.05	0.15	0.1		37.5	DIP8 DMP8	
NJU7004	4	Single	1 to 16	0.015	10	0.001	0.001	0.05	0.15	0.1		37.5	DIP14 DMP14 SSOP14	
NJU7006	1	Single	1.8 to 3.6	0.003	2	0.001	0.001	0.04		0.095			SOT-23-5	
NJU7007	1	Single	1 to 5.5	0.015	4	0.001	0.001	0.1		0.2			SC-88A	
NJU7008	1	Single	1 to 5.5	0.2	4	0.001	0.001	2.4		1			SC-88A	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Low Operating Voltage Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _{IO} [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJU7011	1	Single	1 to 5.5	0.015	10	0.001	0.001	0.1	0.2	0.2			SOT-23-5	
NJU7012	1	Single	1 to 5.5	0.08	10	0.001	0.001	1	1	1			SOT-23-5	
NJU7013	1	Single	1 to 5.5	0.2	10	0.001	0.001	2.4	1	1			SOT-23-5	
NJU7014	2	Single	1 to 5.5	0.015	10	0.001	0.001	0.1	0.2	0.2			DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7015	2	Single	1 to 5.5	0.08	10	0.001	0.001	1	1	1			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7016	2	Single	1 to 5.5	0.2	10	0.001	0.001	2.4	1	1			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7017	1	Single	1 to 5.5	0.75	10	0.001	0.001	3.7	1	1			SOT-23-5	
NJU7018	2	Single	1 to 5.5	0.75	10	0.001	0.001	3.7	1	1			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7019	2	Single	1 to 5.5	0.02	10	0.001	0.001	0.25		0.4			MSOP8(VSP8)	
NJU7021	1	Single	3 to 16	0.15	10	0.001	0.001	0.4	0.35	0.4		27	DMP8 SSOP8	
NJU7022	2	Single	3 to 16	0.15	10	0.001	0.001	0.4	0.35	0.4		27	DIP8 DMP8	
NJU7024	4	Single	3 to 16	0.15	10	0.001	0.001	0.4	0.35	0.4		27	DIP14 DMP14 SSOP14	
NJU7031	1	Single	3 to 16	1	10	0.001	0.001	3.5	2	1.5		20	DIP8 DMP8 SSOP8	
NJU7032	2	Single	3 to 16	1	10	0.001	0.001	3.5	2	1.5		20	DIP8 DMP8	
NJU7034	4	Single	3 to 16	1	10	0.001	0.001	3.5	2	1.5		20	DIP14 DMP14 SSOP14	
NJU7040	1	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.85	0.8	0.8		40	SOT-23-5	
NJU7042	1	Single	2.7 to 5.5	0.015	5	0.001	0.001	0.03		0.047			SOT-23-5	
NJU7043	2	Single	1.8 to 5.5	0.3	10	0.001	0.001	0.7	0.8	0.8		40	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJU7044	4	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.8	0.8	0.8		40	DIP14 DMP14 SSOP14	
NJU7051	1	Single	1 to 16	0.015	2	0.001	0.001	0.05		0.1			DMP8 SSOP8	
NJU7052	2	Single	1 to 16	0.015	2	0.001	0.001	0.05		0.1			DMP8	
NJU7061	1	Single	3 to 16	0.15	2	0.001	0.001	0.4	0.35	0.4		27	DIP8 DMP8 SSOP8	
NJU7062	2	Single	3 to 16	0.15	2	0.001	0.001	0.4	0.35	0.4		27	DIP8 DMP8	
NJU7064	4	Single	3 to 16	0.15	2	0.001	0.001	0.4	0.35	0.4		27	DIP14 DMP14 SSOP14	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Low Operating Voltage Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJU7071	1	Single	5 to 16	0.6	2	0.001	0.001	1.1		1			DIP8 DMP8 SSOP8	
NJU7072	2	Single	5 to 16	0.6	2	0.001	0.001	1.1		1			DIP8 DMP8	
NJU7074	4	Single	5 to 16	0.6	2	0.001	0.001	1.1		1			DMP14 SSOP14	
NJU7091A	1	Single	1 to 5.5	0.015	2	0.001	0.001	0.1	0.19	0.2			SOT-23-5	
NJU7092A	1	Single	1 to 5.5	0.08	2	0.001	0.001	1	1	1			SOT-23-5	
NJU7093A	1	Single	1 to 5.5	0.2	2	0.001	0.001	2.4	1	1			SOT-23-5	
NJU7094	2	Single	1 to 5.5	0.015	4	0.001	0.001	0.1	0.19	0.2			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7095	2	Single	1 to 5.5	0.08	4	0.001	0.001	1	1	1			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJU7096	2	Single	1 to 5.5	0.2	4	0.001	0.001	2.4	1	1			DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	

Small Sized Package Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM2125	1	Single	2.7 to 20	1	7	25	5	1.2	1	1.2			SOT-23-5	
NJM2711	1	Dual	±2 to ±4.5	1.9	7	2000	350	260	1000	180		6.8	SOT-23-5	
NJM2712	2	Dual	±2 to ±4.5	1.9	7	2000	350	260	1000	180		6.8	DMP8 MSOP8(TVSP8)	
NJM2716	1	Single	2.7 to 12	4.2	10	1000	200	40	25	30			SOT-23-5	
NJM2730	1	Single	1.8 to 5	0.32	5	50	5	0.4	1	1.5		10	SOT-23-5	
NJM2743	1	Single	3 to 15	2	5	100	5	0.85	0.8	0.4		18	SOT-23-5	I _{out} =70mA
NJU7007	1	Single	1 to 5.5	0.015	4	0.001	0.001	0.1		0.2			SC-88A	
NJU7008	1	Single	1 to 5.5	0.2	4	0.001	0.001	2.4		1			SC-88A	
NJU7011	1	Single	1 to 5.5	0.015	10	0.001	0.001	0.1	0.2	0.2			SOT-23-5	
NJU7012	1	Single	1 to 5.5	0.08	10	0.001	0.001	1	1	1			SOT-23-5	
NJU7013	1	Single	1 to 5.5	0.2	10	0.001	0.001	2.4	1	1			SOT-23-5	
NJU7017	1	Single	1 to 5.5	0.75	10	0.001	0.001	3.7	1	1			SOT-23-5	
NJU7040	1	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.85	0.8	0.8		40	SOT-23-5	
NJU7042	1	Single	2.7 to 5.5	0.015	5	0.001	0.001	0.03		0.047			SOT-23-5	
NJU7043	2	Single	1.8 to 5.5	0.3	10	0.001	0.001	0.7	0.8	0.8		40	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJU7091A	1	Single	1 to 5.5	0.015	2	0.001	0.001	0.1	0.19	0.2			SOT-23-5	
NJU7092A	1	Single	1 to 5.5	0.08	2	0.001	0.001	1	1	1			SOT-23-5	
NJU7093A	1	Single	1 to 5.5	0.2	2	0.001	0.001	2.4	1	1			SOT-23-5	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

J-FET Input Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM062C	2	Dual	±2 to ±18	0.2	15	0.03	0.005	3.5		1		35	SOP8	
NJM064C	4	Dual	±2 to ±18	0.2	15	0.03	0.005	3.5		1		35	SOP14	
NJM072C	2	Dual	±4 to ±18	1.4	10	0.03	0.005	13		3	4	18	SOP8	
NJM074C	4	Dual	±4 to ±18	1.4	10	0.03	0.005	13		3	4	18	SOP14	
NJM082C	2	Dual	±4 to ±18	1.4	15	0.03	0.005	13		3	4	18	SOP8	
NJM084C	4	Dual	±4 to ±18	1.4	15	0.03	0.005	13		3	4	18	SOP14	
NJM2748	1	Dual	±6 to ±16	2	2	0.05	0.025	13	2.2	2	2.5	20	DIP8 DMP8	
NJM2748A	1	Dual	±6 to ±16	2	2	0.05	0.025	13	2.2	2	2.5	20	DIP8 DMP8	
NJM2749	2	Dual	±6 to ±16	1.9	2.5	0.05	0.025	13	2.2	2	2.5	20	DMP8 SOP8 JEDEC 150mil	
NJM2749A	2	Dual	±6 to ±16	1.9	2.5	0.05	0.025	13	2.2	2	2.5	20	DIP8 DMP8 SOP8 JEDEC 150mil	
NJM8502	2	Dual	±4.5 to ±16	1.3	0.4	0.025	0.006	20	7	7	0.18	10	MSOP8(VSP8)	
NJM8512	2	Dual	±4.5 to ±16	1.3	0.4	0.025	0.006	20	7	7		10	MSOP8(VSP8) SOP8 JEDEC 150mil	
NJM8513	4	Dual	±4.5 to ±16	1.3	0.4	0.025	0.006	20	7	7		10	SSOP14	

High Output Current Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM2743	1	Single	3 to 15	2	5	100	5	0.85	0.8	0.4		18	SOT-23-5	I _{out} =70mA
NJM3414A	2	Single	3 to 15	2	5	100	5	1	1.3	9		18	DIP8 DMP8 SIP8 SSOP8	
NJM4556A	2	Dual	±2 to ±18	4.5	6	50	5	3	8	4		12	DIP8 DMP8 SIP8 SSOP8	
NJU7036	2	Single	2.7 to 5.5	1.75	10	0.001	0.001	0.7	0.4	0.4		60	PCSP20-E3	
NJU7040	1	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.85	0.8	0.8		40	SOT-23-5	
NJU7043	2	Single	1.8 to 5.5	0.3	10	0.001	0.001	0.7	0.8	0.8		40	DIP8 DMP8 SOP8 JEDEC 150mil SSOP8 MSOP8(TVSP8) PCSP20-CC	
NJU7044	4	Single	2.2 to 5.5	0.45	10	0.001	0.001	0.8	0.8	0.8		40	DIP14 DMP14 SSOP14	
NJU77701	1	Single	2.4 to 5.5	3.8	1.5	0.001	0.001	35	34			6	SOT-23-5	
NJU77902	2	Single	6 to 18	3.5	10	0.001	0.001	9		3		80	DFN8-W2	High Output Current
NJU77903	1	Single	6.8 to 36	9.5	6	0.001	0.001	3.5		1.5		50	TO-252-5-L3 DFN8-W2	High Output Current

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

High Voltage Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM2718	2	Single	3 to 36	1.85	4	1200	100	9	1.8	2		24	SOP8 JEDEC 150mil SSOP8	Hi-Capacitance drive capability
NJM8524	4	Single	3 to 36	0.025	1.8	3	0.5	0.04	0.1	0.1		60	SSOP14	
NJU7067	2	Single	4 to 16	0.014	4	0.001	0.001	0.04	0.06			45	DMP8 SSOP8	
NJU7068	4	Single	4 to 16	0.014	4	0.001	0.001	0.04	0.06			45	DMP14 SSOP14	

General Purpose Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM12902	4	Single	2 to 14	0.25	5	20	5	0.7	1.5	1			DMP14 SSOP14 PCSP14-C3	
NJM12904	2	Single	2 to 14	0.35	5	20	5	0.7	1.5	1			DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJM13403	4	Single	2 to 14	0.75	4	25	5	1.2	2	2		25	DIP14 DMP14 SSOP14	
NJM13404	2	Single	2 to 14	1	4	25	5	1.2	2	2		25	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(VSP8) MSOP8(TVSP8)	
NJM14558	2	Dual	±2 to ±7	1.35	3	70	5	2.5	5	4	1.4	10	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(VSP8)	
NJM2059	4	Dual	±4 to ±18	1.75	6	20	5	2	6.8	8	1.4	14	DIP14 DMP14 SSOP14	
NJM2060	4	Dual	±4 to ±18	2.25	6	40	5	4	10	10	1.2	10	DIP14 DMP14 SSOP14	
NJM2902	4	Single	3 to 32	0.25	10	20	5	0.5	0.5	0.7			DIP14 DMP14 SSOP14	
NJM2902C	4	Single	3 to 32	0.3	7	20	2	0.6	1.3	1		30	SOP14 SSOP14	Wide temperature range (-40°C to +125°C)
NJM2902CA	4	Single	3 to 32	0.3	2.5	20	2	0.6	1.3	1		30	SOP14 SSOP14	Wide temperature range (-40°C to +125°C)

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

General Purpose Amplifiers

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise typ.		Package Outline	Notes
											V _{NI}	en		
NJM2904	2	Single	3 to 32	0.35	7	25	5	0.5	0.6	0.5			DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJM2904C	2	Single	3 to 32	0.35	7	20	2	0.6	1.1	0.5		30	SOP8 DMP8 MSOP8(TVSP8) SSOP8 EQFN12-E2	Wide temperature range (-40°C to +125°C)
NJM2904CA	2	Single	3 to 32	0.35	2	20	2	0.6	1.1	0.5		30	SOP8 DMP8 MSOP8(TVSP8) SSOP8	Wide temperature range (-40°C to +125°C)
NJM324C	4	Single	3 to 30	0.3	7	20	2	0.6	1.3	1		30	SOP14 SSOP14	Dual Supply (±1.5 to ±15V)
NJM324CA	4	Single	3 to 30	0.3	2.5	20	2	0.6	1.3	1		30	SOP14 SSOP14	Dual Supply (±1.5 to ±15V)
NJM3403A	4	Single	4 to 36	0.75	5	70	5	1.2	1	1.2		25	DIP14 DMP14 SSOP14	
NJM358C	2	Single	3 to 30	0.35	7	20	2	0.6	1.1	0.5		30	SOP8 SSOP8	Dual Supply (±1.5 to ±15V)
NJM358CA	2	Single	3 to 30	0.35	2	20	2	0.6	1.1	0.5		30	SOP8 SSOP8	Dual Supply (±1.5 to ±15V)
NJM4558	2	Dual	±4 to ±18	1.75	6	25	5	1	3	3	1.4	12.5	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8	
NJM4558C	2	Dual	±4 to ±18	1.75	6	25	5	1.5	3.5	3	1.4	12	SOP8 SSOP8	

Comparators

Part No.	No. of Circuit	Output type	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	Response Time [ns] typ.	Package Outline	Notes
NJM12901	4	Open-Collector	2 to 14	0.2	4	500	DMP14 SSOP14	
NJM12903	2	Open-Collector	2 to 14	0.2	4	500	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)	
NJM2407	2	Open-Collector	2 to 20	0.2	7	800	MSOP8(TVSP8) MSOP8(VSP8)	
NJM2901	4	Open-Collector	2 to 36	0.2	7	1300	DIP14 DMP14 SSOP14	
NJM2901C	4	Open-Collector	2 to 36	0.2	5	1300	SOP14 SSOP14	Wide temperature range (-40°C to +125°C)
NJM2901CA	4	Open-Collector	2 to 36	0.2	2.5	1300	SOP14 SSOP14	Wide temperature range (-40°C to +125°C)

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Comparators

Part No.	No. of Circuit	Output type	Supply Voltage [V] min./max.	Icc/ch. [mA] typ.	V _o [mV] max.	Response Time [ns] typ.	Package Outline	Notes
NJM2903	2	Open-Collector	2 to 36	0.2	7	1500	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(TVSP8)	
NJM2903C	2	Open-Collector	2 to 36	0.225	5	1300	SOP8 SSOP8 DMP8 MSOP8(TVSP8) EQFN14-D7	Wide temperature range (-40°C to +125°C)
NJM2903CA	2	Open-Collector	2 to 36	0.225	2	1300	SOP8 SSOP8 DMP8 MSOP8(TVSP8)	Wide temperature range (-40°C to +125°C)
NJM339C	4	Open-Collector	2 to 36	0.2	5	1300	SOP14 SSOP14	Dual Supply (±1 to ±18V)
NJM390A	1	Open-Collector	2 to 36	0.3	3	1300	SOT-23-5 SC-88A	Wide temperature range (-40°C to +125°C)
NJM391A	1	Open-Collector	2 to 36	0.3	3	1300	SOT-23-5 SC-88A DFN6-G1	Wide temperature range (-40°C to +125°C)
NJM393C	2	Open-Collector	2 to 36	0.225	5	1300	SOP8 SSOP8	Dual Supply (±1 to ±18V)
NJM393CA	2	Open-Collector	2 to 36	0.225	2	1300	SOP8 SSOP8	Dual Supply (±1 to ±18V)
NJM8190	1	Open-Collector	2 to 36	0.3	3	1300	SOT-23-5 SC-88A	Dual Supply (±1 to ±18V)
NJM8191	1	Open-Collector	2 to 36	0.3	3	1300	SOT-23-5 SC-88A DFN6-G1	Dual Supply (±1 to ±18V)
NJU7108	1	Push-Pull	1 to 5.5	0.01	4	500	SC-88A TSOP6	
NJU7109	1	Push-Pull	1.8 to 5.5	0.1	7	110	SC-88A SOT-23-5	
NJU7116	1	Push-Pull	1.8 to 3.6	0.001	2.5	3300	SOT-23-5 DFN6-G1	
NJU7118	1	Open-Drain	1 to 5.5	0.01	4	540	SC-88A	
NJU7119	1	Open-Drain	1.8 to 5.5	0.1	7	160	SC-88A	
NJU7141	1	Open-Drain	1 to 5.5	0.005	10	900	SOT-23-5	
NJU77230	1	Push-Pull	1.8 to 5.5	0.006	6	780	SOT-23-5 SC-88A	Wide temperature range (-40°C to +125°C)
NJU77231	1	Push-Pull	1.8 to 5.5	0.006	6	780	SOT-23-5 SC-88A DFN6-G1	Wide temperature range (-40°C to +125°C)
NJU77232	2	Push-Pull	1.8 to 5.5	0.012	6	780	MSOP8(TVSP8) DFN8-U1	Wide temperature range (-40°C to +125°C)
NJU77240	1	Open-Drain	1.8 to 5.5	0.006	6	840	SOT-23-5 SC-88A	Wide temperature range (-40°C to +125°C)
NJU77241	1	Open-Drain	1.8 to 5.5	0.006	6	840	SOT-23-5 SC-88A DFN6-G1	Wide temperature range (-40°C to +125°C)
NJU77242	2	Open-Drain	1.8 to 5.5	0.012	6	840	MSOP8(TVSP8) DFN8-U1	Wide temperature range (-40°C to +125°C)

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

AFE (Analog Front End)

Part No.	Supply Voltage [V] min./max.	Supply Current [V] typ./max.	Resolution [bit]	Speed [sps]	Feature	Number of Pin	Interface	Package Outline	Notes
NJU9101	2.4 to 3.6	4 to 5.5 (Op-Amp) 150 to 200 (ADC)	16	32 to 2k	Low Power	24	I ² C	EQFN24-LE	High RF noise tolerance Programmable Cell Bias Voltage System Calibration for offset & gain drift
NJU9102	4 to 5.5	300 to 380	14		Digital earth leakage current detection	8		DMP8	Immediate response, Set Earth Leakage Detector Condition, Type A / Type AC switchable
NJU9102A	4 to 5.5	300 to 380	14		Digital earth leakage current detection	8		DMP8	Set Earth Leakage Detector Condition, Type A / Type AC switchable
NJU9103	2.7 to 3.6	4mA	16	0.814k to 6.51k	High Gain	8	SPI	DFN8-V1 SSOP8	Built-in PGA can set a gain of up to 512 Built-in D-A converter (DAC) for calibrating offset voltage of sensor Small-sized packaging can reduce the area of PCB

Power Management

LDO Regulators

Part No.	Key Features	Input Voltage [V]	V _{OUT} Deviation [%]	Output Voltage [V] min./max.	Output Current [mA]	Dropout Voltage [V] typ.	Ripple Rejection Ratio [dB] typ.	Quiescent Current [μA] typ.	ON/OFF Control	Package Outline	Notes
NJM11100	Adjustable type With Noise Bypass Pin	20	±1.0	1.3 to 17	240	0.2	75	200	Yes	SOT-23-6-1 DFN6-H1	Vref=1.25V
NJM12856	Reverse Current Protection Discharge Function Soft-start Function	7	±1.0	1.5 to 5	1000	0.2	77	400	Yes	SOT-89-5-2 TO-252-5-L3	
NJM12884	Reverse Current Protection Discharge Function Soft-start Function	7	±1.0	1.5 to 5	500	0.18	68	200	Yes	SOT-89-5-2 TO-252-5-L3	
NJM12884-H	Reverse Current Protection Discharge Function Soft-start Function	7	±1.0	1.5 to 5	500	0.18	68	200	Yes	DFN8-WA	
NJM12877	Reverse Current Protection Discharge Function Soft-start Function	7	±1.0	1.5 to 5	200	0.12	64	160	Yes	DFN6-G1 SOT-23-5	
NJM12888	Reverse Current Protection Discharge Function Soft-start Function	7	±1.0	1.5 to 5	300	0.1	66	150	Yes	DFN6-G1 SOT-23-5	
NJM2370	With Noise Bypass Terminal	20	±3.0	2 to 15.5	150	0.1	60	180	Yes	SOT-89-5-1 MSOP8(TVSP8) MSOP8(VSP8)	
NJM2386		35	±2.0	3.3 to 12	1000	0.2	67		Yes	TO-252-5-L3	
NJM2386A		35	±2.0	3.3 to 12	1000	0.2	67		Yes	TO-252-5-L3	
NJM2387	Adjustable type	35	±2.0	1.5 to 20	1000	0.2	67		Yes	TO-252-5-L3	Vref=1.26V
NJM2387A	Adjustable type	35	±2.0	1.5 to 20	1000	0.2	65		Yes	TO-252-5-L3	Vref=1.26V
NJM2388		35	±2.0	3.3 to 12	1000	0.2	67		Yes	TO-220F-4	
NJM2389	Adjustable type	35	±2.0	1.5 to 20	1000	0.2	65			TO-220F-4	Vref=1.26V
NJM2391		10	±1.0	2.5 to 5	1000	1.1	62	2300		TO-252-3-L1	
NJM2801	With Reset (Output Voltage Monitor Type)	14	±1.0	1.5 to 5	150	0.1	60	250		SOT-23-5 SOT-89-5-1	
NJM2804	With Reset (Input Voltage Monitor Type)	14	±1.0	1.5 to 5	300	0.1	75	250		SOT-89-5-1	
NJM2805	With Reset (Output Voltage Monitor Type)	14	±1.0	1.5 to 5	300	0.1	75	250		SOT-89-5-1	
NJM2806	With Reset (Input Voltage Monitor Type)	14	±1.0	1.5 to 5	500	0.18	75	330		TO-252-5-L3	
NJM2815	Voltage Correction Circuit	10	±1.0	5.5 to 8	1500	0.2		980	Yes	HSOP8-M1	
NJM2816	Voltage Correction Circuit	10	±1.0	5.5 to 8	1800	0.25		1150	Yes	HSOP8-M1	
NJM2819A		10	±1.0	1.8 to 7	2000	0.1	65	500	Yes	TO-252-5-L3	
NJM2827	Negative type Discharge Function Soft-start Function	-14	±1.5	-1.5 to -10	100	0.13	65	130		SC-88A	
NJM2828	Negative type Discharge Function Soft-start Function	-14	±1.5	-1.5 to -10	100	0.13	65	130	Yes	SC-88A	
NJM2829	Negative type Discharge Function Soft-start Function	-14	±1.5	-0.8 to -1.3	100	0.13	80	140	Yes	SC-88A	
NJM2830		20	±1.0	2.1 to 15.5	300	0.1	75	130	Yes	SOT-89-5-1	
NJM2831		20	±1.0	2.1 to 15.5	100	0.1	75	120	Yes	DFN6-G1 SOT-23-5	
NJM2835		20	±1.0	2.1 to 15.5	500	0.18	75	200		TO-252-3-L1	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

LDO Regulators

Part No.	Key Features	Input Voltage [V]	V _{OUT} Deviation [%]	Output Voltage [V] min./max.	Output Current [mA]	Dropout Voltage [V] typ.	Ripple Rejection Ratio [dB] typ.	Quiescent Current [uA] typ.	ON/OFF Control	Package Outline	Notes
NJM2836		20	±1.0	2.1 to 15.5	500	0.18	75	200	Yes	TO-252-5-L3	
NJM2837	Reverse Current Protection	20	±1.0	2.4 to 15	1000	0.2	80	420	Yes	TO-252-5-L3	
NJM2839	2-Channel Positive Channel Negative Channel	-14 20	±1.5	-6 to -7.5 12 to 15	100	0.1 0.13	75 65	120 130	Yes	MSOP8(VSP8)	
NJM2841	Low Output Voltage Type Dual Supply Voltage Type(sequence free)	10	±1.0	0.8 to 2.5	500	0.1	86	180	Yes	SOT-23-5 SOT-89-5-2	
NJM2842	Low Output Voltage Type Dual Supply Voltage Type(sequence free)	7	±1.0	0.8 to 1.8	1000	0.1	91	300	Yes	DFN6-H1 SOT-89-5-2 TO-252-5-L3	
NJM2845		14	±1.0	1.5 to 5	800	0.18	75	400		TO-252-3-L1	
NJM2846		14	±1.0	1.5 to 5	800	0.18	75	400	Yes	TO-252-5-L3	
NJM2847	Low Output Voltage Type With Noise Bypass Pin	10	±1.0	0.8 to 1.4	150		85	140	Yes	SC-88A	
NJM2855		10	±1.0	1.5 to 5	1000	0.2	75	400		TO-252-3-L1	
NJM2856		10	±1.0	1.5 to 5	1000	0.2	75	400	Yes	HSOP8-M1 TO-252-5-L3	
NJM2857	Reverse Current Protection	10	±1.0	1.5 to 5	1500	0.2	80	500	Yes	TO-252-5-L3	
NJM2860	With Noise Bypass Pin	14	±1.0	1.5 to 5	100	0.1	70	120	Yes	SC-88A	
NJM2861	With Noise Bypass Pin	14	±1.0	1.5 to 5	100	0.1	70	120	Yes	SOT-23-5	
NJM2862	Variation of Pin Configuration (NJM2861) With Noise Bypass Pin	14	±1.0	1.5 to 5	100	0.1	70	120	Yes	SOT-23-5	
NJM2863	With Noise Bypass Pin	14	±1.0	1.5 to 5	100	0.1	75	120	Yes	SOT-23-5	
NJM2864	Variation of Pin Configuration (NJM2863) With Noise Bypass Pin	14	±1.0	1.5 to 5	100	0.1	75	120	Yes	SOT-23-5	
NJM2865		14	±1.0	1.5 to 5	100	0.1	75	120	Yes	SC-88A SOT-23-5	
NJM2866	Variation of Pin Configuration (NJM2865)	14	±1.0	1.5 to 5	100	0.1	75	120	Yes	SOT-23-5	
NJM2867		14	±1.0	2.1 to 5	100	0.1	75	120	Yes	SC-88A SOT-23-5	
NJM2868	Variation of Pin Configuration (NJM2867)	14	±1.0	2.1 to 5	100	0.1	75	120	Yes	SOT-23-5	
NJM2870	4.7uF(Tantalum Capacitor) With Noise Bypass Pin	14	±2.0	1.5 to 5	150	0.12	60	200	Yes	SOT-23-5	
NJM2871	With Noise Bypass Pin	14	±2.0	1.5 to 5	150	0.1	70	120	Yes	SOT-23-5	
NJM2871A	With Noise Bypass Pin	14	±1.0	1.5 to 5	150	0.1	70	120	Yes	SOT-23-5	
NJM2871B	With Noise Bypass Pin	14	±1.0	1.5 to 5	150	0.1	75	120	Yes	SOT-23-5	
NJM2872	Variation of Pin Configuration (NJM2871) With Noise Bypass Pin	14	±2.0	1.5 to 5	150	0.1	70	120	Yes	SOT-23-5	
NJM2872A	Variation of Pin Configuration (NJM2871A) With Noise Bypass Pin	14	±1.0	1.5 to 5	150	0.1	70	120	Yes	SOT-23-5	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

LDO Regulators

Part No.	Key Features	Input Voltage [V]	V _{OUT} Deviation [%]	Output Voltage [V] min./max.	Output Current [mA]	Dropout Voltage [V] typ.	Ripple Rejection Ratio [dB] typ.	Quiescent Current [uA] typ.	ON/OFF Control	Package Outline	Notes
NJM2872B	Variation of Pin Configuration (NJM2871B) With Noise Bypass Pin	14	±1.0	1.5 to 5	150	0.1	75	120	Yes	SOT-23-5	
NJM2874	Variation of Pin Configuration (NJM2875/76)	14	±1.0	1.5 to 5	150	0.1	75	120	Yes	SOT-23-5	
NJM2875	Variation of Pin Configuration (NJM2874/76)	14	±1.0	1.5 to 5	150	0.1	75	120	Yes	SOT-23-5	
NJM2876	Variation of Pin Configuration (NJM2874/75)	14	±1.0	1.5 to 5	150	0.1	75	120	Yes	SOT-23-5	
NJM2877	With Noise Bypass Pin	10	±1.0	1.5 to 5	150	0.1	75	120	Yes	SC-88A SOT-23-5	
NJM2878		10	±1.0	1.5 to 5	150	0.1	75	140	Yes	DFN4-F1 SC-82AB SC-88A	
NJM2879-H	Reverse Current Protection Discharge Function	7	±2.0	1.5 to 5	200	0.12	66	150	Yes	SOT-23-5	
NJM2880	With Noise Bypass Pin	14	±1.0	1.5 to 5	300	0.1	70	120	Yes	SOT-89-5-1	
NJM2881	With Noise Bypass Pin	14	±1.0	1.5 to 5	300	0.1	75	120	Yes	SOT-23-5	
NJM2882	Variation of Pin Configuration (NJM2881) With Noise Bypass Pin	14	±1.0	1.5 to 5	300	0.1	75	120	Yes	SOT-23-5	
NJM2883	With Noise Bypass Pin	14	±1.0	1.5 to 5	300	0.1	75	120	Yes	SOP8 JEDEC 150mil	
NJM2884		10	±1.0	1.5 to 5	500	0.18	75	200	Yes	SOT-89-5-1	
NJM2884A		10	±1.0	1.5 to 5	500	0.18	75	200	Yes	DFN6-H1 TO-252-5-L3	
NJM2885		14	±1.0	1.5 to 5	500	0.18	75	200		TO-252-3-L1	
NJM2886		14	±1.0	1.5 to 5	500	0.18	75	200	Yes	TO-252-5-L3	
NJM2887	Adjustable type	14	±1.0	1.5 to 6	500	0.18	70	200	Yes	TO-252-5-L3	Vref=1.29V
NJM2888		10	±1.0	1.5 to 5	300	0.1	75	130	Yes	DFN4-F1 SOT-23-5	
NJM2892	2-Channel 1-Input,2-Output	14	±1.0	1.5 to 5	100	0.1	75	150 270	Yes	SOT-23-6-1	
NJM2893	3-Channel 1-Input,3-Output	14	±1.0	1.5 to 5	150	0.1	75	150 270 390	Yes	MSOP8(TVSP8)	
NJM2894	1-Channel(Io=150mA) 2/3-Channel(Io=80mA) 1-Input,3-Output	14	±1.0	1.5 to 5	150	0.1	75	150 270 390	Yes	MSOP8(TVSP8)	
NJU7200series		14	±5.0	1 to 5.5	15	0.36		1.2		SOT-89-3	
NJU7201series		14	±5.0	1.2 to 5.5	15	0.2		19		SOT-89-3	
NJU7202series		15	±5.0	3 to 5	100	0.4		20		SOT-89-3	
NJU7211series	Negative type	-14	±5.0	-2 to -5	20	0.2		19		SOT-89-3	
NJU7221series		14	±2.0	1.2 to 5.5	15	0.2		19		SOT-89-3	
NJU7222series		15	±2.0	3 to 5	100	0.4		20		SOT-89-3	
NJU7223		18	±2.0	1.8 to 5	500	0.4	57	30		TO-220F-3 TO-252-3-L1	
NJU7231		18	±2.0	1.2 to 5.2	15	0.2		10		SOT-23-5 SOT-89-3	
NJU7241		15	±2.0	1.8 to 6	60	0.2	55	20	Yes	SOT-23-5	
NJU7250		9	±2.0	2.5 to 3.3	150	0.2		35	Yes	SOT-23-5	

LDO Regulators

Part No.	Key Features	Input Voltage [V]	V _{OUT} Deviation [%]	Output Voltage [V] min./max.	Output Current [mA]	Dropout Voltage [V] typ.	Ripple Rejection Ratio [dB] typ.	Quiescent Current [uA] typ.	ON/OFF Control	Package Outline	Notes
NJU7254	2-Channel 1-Input,2-Output	9	±1.0	1.5 to 5	100	0.09	65	18 30	Yes	SOT-23-6-1	
NJU7272	with Reset (Input Voltage Monitor Type) Delay Time (External Capacitor)	11	±1.0	1.5 to 5	100	0.17		3.5	Yes	SOT-23-6-1	
NJU7741		10	±1.0	1.5 to 6	100	0.17		1.5	Yes	SOT-23-5	
NJU7744	Discharge Function	10	±1.0	1.5 to 6	100	0.17		1.5	Yes	SOT-23-5	
NJU7747		10	±1.0	1.5 to 5	100	0.17		1.5	Yes	SC-82AB	
NJU7748	Discharge Function	10	±1.0	1.5 to 5	100	0.17		1.5	Yes	SC-82AB	
NJU7751		10	±1.0	1.5 to 5	100	0.15	65	20	Yes	SOT-23-5	
NJU7754	Discharge Function	10	±1.0	1.5 to 5	100	0.15	65	20	Yes	SOT-23-5	
NJU7757		10	±1.0	1.5 to 5	100	0.15	65	20	Yes	SC-82AB	
NJU7758	Discharge Function	10	±1.0	1.5 to 5	100	0.15	65	20	Yes	SC-82AB	
NJU7771		10	±1.0	1.5 to 5	150	0.15	65	18	Yes	SOT-23-5	
NJU7772	Variation of Pin Configuration (NJU7771)	10	±1.0	1.5 to 5	150	0.15	65	18	Yes	SOT-23-5	
NJU7773	Variation of Pin Configuration (NJU7771)	10	±1.0	1.5 to 5	150	0.15	65	18	Yes	SOT-23-5	
NJU7774	Discharge Function	10	±1.0	1.5 to 5	150	0.15	65	18	Yes	SOT-23-5	
NJU7775	Discharge Function Variation of Pin Configuration (NJU7774)	10	±1.0	1.5 to 5	150	0.15	65	18	Yes	SOT-23-5	
NJU7776	Discharge Function Variation of Pin Configuration (NJU7774)	10	±1.0	1.5 to 5	150	0.15	65	18	Yes	SOT-23-5	
NJU7777		9	±1.0	1.5 to 5	150	0.13	65	18	Yes	SC-82AB	
NJU7780		10	±1.0	1.5 to 5	300	0.15	65	20	Yes	SOT-89-5-1	
NJU7781	Discharge Function	10	±1.0	1.5 to 5	300	0.15	65	20	Yes	SOT-89-5-1	
NJU7790		9	±1.0	1.5 to 5	500	0.12	65	30	Yes	SOT-89-5-1	
NJW4104	Ultra Low Quiescent Current	45	±1.0	2.5 to 15	200	0.18	41	5.5 (A ver.) 5 (B ver.)	Yes	SOT-89-5-2 SOT-89-3 TO-252-3-L1	
NJW4107	Fast Transient Response	45	±1.0	2.5 to 15	300	0.12	56	75(A ver.) 70(B ver.)	Yes	SOT-89-5-2 SOT-89-3	
NJW4111	Adjustable type Dual input voltage (V _{IN} : 0.8 to 3.3V /V _{BIAS} : 4.3 to 5.5V)	4	±1.0	0.8 to 1.8	3000	0.08		1400	Yes	HSOP8-M1	V _{FB} =0.65V ±1.0%
NJW4113T1	Watchdog Timer (Watchdog Timer Enable Function, WDT Reset Time and Output Delay Hold Time with external capacitor)	45	±1.0	2.5 to 5	500	0.3	45	37		HSOP8-M1	
NJW4116T1	with Reset (Adjustable RESET Output Delay Hold Time)	45	±1.0	3.3 to 5	500	0.27	55	55		TO-252-5-L3	
NJW4182		45	±1.0	2.5 to 15	100	0.18	54	9		SOT-23-5 SOT-89-3 DFN6-H1	
NJW4182-H	Low Current Consumption	45	±3.0	2.5 to 15	100	0.18	54	9		SOT-23-5	

LDO Regulators

Part No.	Key Features	Input Voltage [V]	V _{OUT} Deviation [%]	Output Voltage [V] min./max.	Output Current [mA]	Dropout Voltage [V] typ.	Ripple Rejection Ratio [dB] typ.	Quiescent Current [μA] typ.	ON/OFF Control	Package Outline	Notes
NJW4183	Reverse Current Protection ON/OFF Control (A ver.)	40	±1.0	2 to 5	100	0.16	45 (V _{OUT} 3.3V) 43 (V _{OUT} 5V)	18(A ver.) 15(B ver.)	Yes	SOT-89-3 SOT-89-5-2 TO-252-3-L1 TO-252-5-L3	
NJW4184	ON/OFF Control (A ver.)	40	±1.0	2.5 to 15	300	0.1	42 (V _{OUT} 3.3V) 40 (V _{OUT} 5V)	12(A ver.) 9(B ver.)	Yes	SOT-89-3 SOT-89-5-2 TO-252-3-L1 TO-252-5-L3	
NJW4185	ON/OFF Control (A ver.)	45	±1.0	2 to 15	500	0.27	62	55(A ver.) 48(B ver.)	Yes	TO-252-5-L3 TO-252-3-L1	
NJW4186	Adjustable type	45	±1.0	2 to 16	500	0.27	60	50	Yes	TO-252-5-L3	
NJW4187		45	±1.0	2 to 15	1000	0.27	58 (V _{OUT} 3.3V) 54 (V _{OUT} 5V)	55	Yes	TO-252-5-L3 TO-252-3-L1	
NJW4188	Adjustable type	45	±1.0	2 to 15	1000	0.27	58	55	Yes	TO-252-5-L3	

3-Terminal Voltage Regulators

Part No.	Key Features	Operating Voltage [V]	Output Voltage [V] min./max.	Package Outline	Notes
NJM7800S	Positive type	35/40	5 to 24	TO-252-3-L1	Wide temperature range (-40°C to +125°C), Output Capacitor (Ceramics)
NJM78L	Positive type	30/35/40	2.6 to 24	SOT-89-3 SOP8 JEDEC 150mil	
NJM78L00S	Positive type	30/35	3 to 15	SOT-89-3	Wide temperature range (-40°C to +125°C), Output Capacitor (Ceramics)
NJM78LR05	With Reset Function	20	to 5	DIP8 DMP8 SIP8 SOT-89-5-1	
NJM78M	Positive type	35/40	5 to 24	TO-220F-3 TO-252-3-L1	
NJM78M00S	Positive type	35	5 to 15	TO-252-3-L1	Wide temperature range (-40°C to +125°C), Output Capacitor (Ceramics)
NJW4181	Quiescent Current 9μA(typ.) I _o =100mA ON/OFF Control (A ver.)	40	2.5 to 15	DFN6-G1 SOT-89-3	

Voltage Detectors

Part No.	Key Features	Operating Voltage [V]	Manual Reset	Voltage Detection [V] min./max.	Voltage Detection (Deviation) [%]	Hysteresis Voltage [V] typ.	Quiescent Current [μ A] typ.	Package Outline	Notes
NJU7700	Nch. Open Darin Type	10		1.3 to 6(0.1step)	± 1.0	$V_{DET} \times 0.05$	0.8	SC-82AB SOT-23-5	
NJU7701	C-MOS Output Type	10		1.3 to 6(0.1step)	± 1.0	$V_{DET} \times 0.05$	0.8	SC-82AB SOT-23-5	
NJU7702	Nch. Open Darin Type	10		1.3 to 6(0.1step)	± 1.0	$V_{DET} \times 0.05$	0.8	SOT-23-5	
NJU7703	C-MOS Output Type	10		1.3 to 6(0.1step)	± 1.0	$V_{DET} \times 0.05$	0.8	SOT-23-5	
NJU7704	Nch. Open Darin Type Delay Time(External Capacitor)	10	Yes	1.5 to 6(0.1step)	± 1.0	90m	0.9	SC-88A SOT-23-5	
NJU7705	C-MOS Output Type Delay Time(External Capacitor)	10	Yes	1.5 to 6(0.1step)	± 1.0	90m	0.9	SC-88A SOT-23-5	
NJU7706	Nch. Open Darin Type Delay Time(Built-in 50ms/100ms/200ms)	10	Yes	1.5 to 6(0.1step)	± 1.0	90m	1.3	SOT-23-5	
NJU7707	C-MOS Output Type Delay Time(Built-in 50ms/100ms/200ms)	10	Yes	1.5 to 6(0.1step)	± 1.0	90m	1.3	SOT-23-5	
NJU7708	Nch. Open Darin Type Delay Time(Adjustable 50ms/100ms/200ms)	10		1.5 to 6(0.1step)	± 1.0	90m	1.3	SOT-23-5	
NJU7709	C-MOS Output Type Delay Time(Adjustable 50ms/100ms/200ms)	10		1.5 to 6(0.1step)	± 1.0	90m	1.3	SOT-23-5	
NJU7711	C-MOS Output Type	10		1.3 to 6(0.1step)	± 1.0	$V_{DET} \times 0.05$	0.8	SC-88A SOT-23-5	
NJU7712	Nch. Open Darin Type	10		1.3 to 6(0.1step)	± 1.0	$V_{DET} \times 0.05$	0.8	SC-88A SOT-23-5	
NJU7713	C-MOS Output Type	10		1.3 to 6(0.1step)	± 1.0	$V_{DET} \times 0.05$	0.8	SC-88A SOT-23-5	
NJU7719	Nch. Open Darin Type	10		1.3 to 6(0.1step)	± 1.0	$V_{DET} \times 0.05$	0.8	SOT-89-3	

Battery Back-up ICs

Part No.	Key Features	Operating Voltage [V]	Quiescent Current Normal Operation [μ A]	Quiescent Current Back-up Mode [μ A]	ΔV I-O (Reg1.2.3) [V] typ.	Package Outline	Notes
NJU7286	Low Dropout Voltage(2-channel) Voltage Detection(2-channel)	10	12	2.1	reg1/0.06($I_{RO}=3mA$) reg2/0.3($I_{O}=23mA$)	SSOP8 MSOP8(TVSP8)	
NJU7287	Low Dropout Voltage(3-channel) Voltage Detection(2-channel)	10	13	2.1	reg1/0.06($I_{RO}=3mA$) reg2/0.3($I_{OUT}=23mA$) reg3/0.06($I_{CH}=3mA$)	MSOP8(TVSP8)	

System Reset ICs

Part No.	Key Features	Operating Voltage [V]	Watch Dog Timer	Voltage Detection (Arbitray)	Voltage Detection (Setting by Inside) [V]	Quiescent Current [μ A]	Operating Voltage [V] min.	Package Outline	Notes
NJU2102A	Suitable for replacement from MB3773 / NJM2102	20	Yes	Yes	4.2	320	3.5	DMP8	
NJU2103A	Suitable for replacement from MB3771 / NJM2103	20		Yes	4.2	280	2.5	DMP8 DIP8 MSOP8(TVSP8)	
NJU7291		8	Yes	Yes	3	170	2.5	DIP8 MSOP8(TVSP8)	
NJU7295	With Delay Circuit (Rising / Falling independent setting)	7		Yes	1 (Adjustable)	1.7	1.5	SOT-23-6-1	
NJU7296	With Delay Circuit (Rising / Falling independent setting)	7		Yes	1 (Adjustable)	1.7	1.5	SOT-23-6-1	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Shunt Regulators

Part No.	Reference Voltage [V] typ.	Ref. tol.	Cathode Voltage [V] max.	Cathode Current [mA] max.	Minimum Cathode Current [μ A] typ.	Package Outline	Notes
NJM1431A	2.465	± 1	36	100	400	DFN4-F1 SOT-23-5 SOT-89-3	
NJM2373	1.25	± 2	13	30	80	SOT-23-5	
NJM2373A	1.25	± 1	13	30	80	SOT-23-5 SOT-89-3	
NJM2376	1.25	± 1	13	30	80	SOT-23-5 SOT-89-3	
NJM2380	2.465	± 2	18	100	400	DMP8 SOP8 JEDEC 150mil SOT-23-5 SOT-89-3	
NJM2380A	2.465	± 1	18	100	400	DMP8 SOP8 JEDEC 150mil SOT-23-5 SOT-89-3	
NJM2390	2.465	± 2	18	100	400	SOT-89-3	
NJM2390A	2.465	± 1	18	100	400	SOT-89-3	
NJM2820	1.25	± 0.7	13	30	80	SOT-23-5	
NJM2821	1.25	± 0.7	13	30	80	SOT-23-5	
NJM2822	1.25	± 0.7	13	30	80	SOT-23-5	
NJM2823	1.136	± 0.4	13	12	60	SOT-23-5	
NJM2825	1.2	± 0.5	13	12	0.7	SOT-23-5	
NJM431	2.495	± 2	36	100	400	DIP8 DMP8 SOT-89-3	
NJM431S	2.495	± 1.8	36	100	400	SOT-89-3 SOT-23-5	
NJM432S	2.495	± 1.8	36	100	400	SOT-89-3 SOT-23-5	Variation of Pin Configuration (NJM431S)

Switching Regulators (Step-Down)

Part No.	Application	SW. Device	Number of Outputs	Operating Voltage [V] min./max.	Output Current [A]	Oscillation Frequency Range [kHz] min./max.	Stand-by Function	Power Good	Package Outline	Notes
NJM2309	Step-Down	Controller	1	3.6 to 32		5 to 500			DMP8 SOP8 JEDEC 150mil SSOP8	
NJM2340	Step-Down	Controller	1	3.6 to 32		20 to 500			DMP8 MSOP8(TVSP8)	Constant Voltage / Constant Current Output
NJM2344	Step-Down/ Step-Up/Inverting	Internal Tr.	1	3 to 40	1.5	1 to 150	Yes		DIP8 DMP8	The NJM2392 with standby function
NJM2345	Step-Down	Internal Tr.	1	3 to 40	1.5	1 to 150	Yes		DIP8 DMP8	Buck converter of the NJM2344
NJM2374A	Step-Down/ Step-Up/Inverting	Internal Tr.	1	2.5 to 40	1.5	0.1 to 100			DIP8 DMP8 SOP8 JEDEC 150mil SSOP14	PWM control version of the NJM2360
NJM2383	Step-Down	Controller	1	3.6 to 32		5 to 350	Yes		DIP14 DMP14 SSOP10	
NJM2384	Step-Down	Controller	1	3.6 to 32		5 to 500			DIP14 DMP14 SSOP10	
NJM2392	Step-Down/ Step-Up/Inverting	Internal Tr.	1	3 to 40	1.5	1 to 150			DIP8 DMP8	PWM control version of the NJM2360

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Switching Regulators (Step-Down)

Part No.	Application	SW. Device	Number of Outputs	Operating Voltage [V] min./max.	Output Current [A]	Oscillation Frequency Range [kHz] min./max.	Stand-by Function	Power Good	Package Outline	Notes
NJM2393	Step-Down	Internal Tr.	1	3 to 40	1.5	1 to 150			DIP8 DMP8	Buck converter of the NJM2392
NJU7630	Step-Down	Controller	1	2.2 to 8		300 to 1000			DMP8 MSOP8(TVSP8)	
NJU7631	Step-Down	Controller	1	2.2 to 8		300 to 1000			MSOP8(TVSP8)	Power Saving PWM / PFM Control
NJU7632	Step-Down	Controller	1	2.2 to 8		300 to 1000	Yes		MSOP8(TVSP8)	
NJU7640	Step-Down	Controller	1	2.2 to 8		300 to 1000			MSOP8(TVSP8)	
NJU7650	Step-Down	Controller	1	2.2 to 8		300 to 1000			MSOP8(TVSP8)	Constant Voltage / Constant Current Output
NJU7680	Step-Down/ Step-Up	Controller	2	2.3 to 7		300 to 1000	Yes		PCSP24-ED SSOP16	SteDown,Step-Up/ SEPIC circuit(2-channel)
NJU7690	Step-Down	Controller	1	2.2 to 8		300 to 1000	Yes		MSOP10(TVSP10)	Synchronous Rectification
NJU7691	Step-Down	Internal FET	1	2.2 to 7	0.3	300 to 1000	Yes		MSOP8(TVSP8)	Synchronous Rectification
NJW1616	Step-Down	Internal FET	1	4.5 to 20	0.5	500(Fixed)	Yes		SOT-23-6-1	LT1616 LM2736 Compatible
NJW1933	Step-Down	Internal FET	1	4.5 to 40	0.5	500(Fixed)	Yes		SOT-23-6-1	LT1933 LM2842 Compatible
NJW4110	Step-Down	Internal FET	2	2.7 to 5.5	3	100 to 2400	Yes	Yes	EQFN24-LE	Synchronous Rectification Light Load Mode External Clock Synchronization
NJW4119	Step-Down	Internal FET	1	6.5 to 40	2.4	270 to 330	Yes	Yes	HTSSOP24-P1	USB Power Supply
NJW4128	Step-Down	Internal FET	1	4.5 to 40	2.5	450 (Fixed, A ver) 300 (Fixed, B ver)	Yes	Yes	HSOP8-M1	External Clock Synchronization
NJW4150A	Step-Down	Internal FET	1	6.2 to 40	0.3	1000(Fixed)	Yes		MSOP8(TVSP8)	
NJW4152A	Step-Down	Internal FET	1	4.6 to 40	1	300 to 1000	Yes		HSOP8-M1	
NJW4152B	Step-Down	Internal FET	1	4.6 to 40	0.6	300 to 1000	Yes		MSOP8(VSP8)	
NJW4152-AB	Step-Down	Internal FET	1	3.6 to 40	1	300 to 1000	Yes		HSOP8-M1	
NJW4153	Step-Down/Inverting	Internal FET	1	4.6 to 40	1	1000(Fixed)	Yes		SOT-89-5-2 DFN8-V1	
NJW4154	Step-Down	Internal FET	1	4.5 to 40	3	300(Fixed)	Yes	Yes	HSOP8-M1 TO-252-5-L3	External Clock Synchronization
NJW4155	Step-Down	Internal FET	1	4.5 to 40	1.8	450 (Fixed, A ver) 300 (Fixed, B ver)	Yes	Yes	HSOP8-M1 TO-252-5-L3	External Clock Synchronization
NJW4160	Step-Down	Controller	1	3 to 35		50 to 1000	Yes		MSOP8(VSP8) DMP8	
NJW4161	Step-Down	Controller	1	3.1 to 40		50 to 1000	Yes		MSOP8(VSP8) DIP8	
NJW4162A	Step-Down	Controller	2	4.3 to 40		100 to 1000	Yes	Yes	SSOP20-C3	External Clock Synchronization
NJW4170	Step-Down	Internal FET	1	4.5 to 40	1	2400 (Fixed, A ver.) 2100 (Fixed, B ver.)	Yes		SOT-89-5-2 DFN8-V1	External Clock Synchronization
NJW4171	Step-Down	Internal FET	1	3.4 to 40	2.5	100 to 2400	Yes	Yes	HSOP8-M1	Light Load Mode External Clock Synchronization
NJW4177	Step-Down	Internal FET	1	3.6 to 40	2	450 (Fixed, A ver) 300 (Fixed, B ver)	Yes	Yes	HSOP8-M1	Synchronous Rectification

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Switching Regulators (Step-Down)

Part No.	Application	SW. Device	Number of Outputs	Operating Voltage [V] min./max.	Output Current [A]	Oscillation Frequency Range [kHz] min./max.	Stand-by Function	Power Good	Package Outline	Notes
NJW4196	Step-Down	Internal FET	1	4.45 to 40	3.5	450(Fixed) 100 to 1000	Yes	Yes	HSOP8-M1	External Clock Synchronization
NJW4750T1	Step-Down	Internal FET	4	3.9 to 40	1.2 0.6 0.6 0.3	280 to 2400	Yes	Yes	EQFN26-HH	PMIC

Switching Regulators (Step-Up / Fly-Buck)

Part No.	Application	SW. Device	Operating Voltage [V] min./max.	Switching Current [A] min.	Oscillation Frequency Range [kHz] min./max.	Stand-by Function	Package Outline	Notes
NJM2344	Step-Down/ Step-Up/Inverting	Internal Tr.	3 to 40	1.5	1 to 150	Yes	DIP8 DMP8	The NJM2392 with standby function
NJM2368	Step-Up/Fly-Back	Controller	3.6 to 32		5 to 350		DIP8 DMP8 SOP8 JEDEC 150mil SSOP8	Tr. Drive
NJM2369	Step-Up/Fly-Back	Controller	3.6 to 32		5 to 350		DIP8 DMP8 SOP8 JEDEC 150mil SSOP8	MOSFET Drive
NJM2374A	Step-Down/ Step-Up/Inverting	Internal Tr.	2.5 to 40	1.5	0.1 to 100		DIP8 DMP8 SOP8 JEDEC 150mil SSOP14	PWM control version of the NJM2360
NJM2377	Step-Up/Fly-Back	Controller	2.7 to 18		10 to 500		DIP8 DMP8 SSOP8 MSOP8(VSP8)	
NJM2379	Step-Up/Fly-Back	Controller	3.6 to 32		5 to 350		DIP8 DMP8 SOP8 JEDEC 150mil SSOP8	MOSFET Drive Only External Clock Synchronization
NJM2381	Step-Up/Fly-Back	Controller	3.6 to 32		5 to 350		DIP14 DMP14 SSOP10	
NJM2392	Step-Down/ Step-Up/Inverting	Internal Tr.	3 to 40	1.5	1 to 150		DIP8 DMP8	PWM control version of the NJM2360
NJU7600	Step-Up/Fly-Back	Controller	2.2 to 8		300 to 1000		DMP8 MSOP10(TVSP10) MSOP8(TVSP8)	
NJU7601	Step-Up/Fly-Back	Controller	2.2 to 8		300 to 1000		DMP8 MSOP8(TVSP8)	Power Saving PWM / PFM Control
NJU7602	Step-Up/Fly-Back	Controller	2.2 to 8		300 to 1000	Yes	DMP8 MSOP8(TVSP8)	
NJU7606	Step-Up/Fly-Back	Controller	2.2 to 8		300 to 1000	Yes	MSOP10(TVSP10)	With load SW. function
NJU7610	Step-Up/Fly-Back	Controller	2.2 to 8		300 to 1000		DMP8 MSOP8(TVSP8)	
NJU7620	Step-Up/Fly-Back	Controller	2.2 to 8		300 to 1000		MSOP8(TVSP8)	Constant Voltage / Constant Current Output
NJU7677	Step-Up	Controller	1.8 to 7		300 to 1000		MSOP8(TVSP8)	
NJU7680	Step-Down/Step-Up	Controller	2.3 to 7		300 to 1000	Yes	PCSP24-ED SSOP16	SteDown,Step-Up/ SEPIC circuit(2-channel)
NJW4131A	Step-Up	Internal FET	4 to 35	1.4	300 to 1000	Yes	HSOP8-M1	
NJW4131B	Step-Up	Internal FET	4 to 35	1	300 to 1000	Yes	MSOP8(VSP8)	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Switching Regulators (Step-Up / Fly-Buck)

Part No.	Application	SW. Device	Operating Voltage [V] min./max.	Switching Current [A] min.	Oscillation Frequency Range [kHz] min./max.	Stand-by Function	Package Outline	Notes
NJW4132	Step-Up	Internal FET	4.5 to 40	1.75	300(Fixed) 700(Fixed) 2000(Fixed)	Yes	SOT-89-5-2	External Clock Synchronization
NJW4133	Step-Up	Internal FET	3 to 40	5	100 to 2400	Yes	HSOP8-M1	External Clock Synchronization
NJW4138	Step-Up	Internal FET	4.5 to 40	1.75	2000(Fixed)	Yes	SOT-89-5-2	Capacitor Charge application
NJW4140	Step-Up/Fly-Back	Controller	3 to 40		40 to 1000	Yes	DMP8 MSOP8(VSP8)	
NJW4141	Step-Up	Controller	3 to 40		50 to 500	Yes	SSOP20-C3	2-phase
NJW4813	Step-Up	Internal FET	2.7 to 5.5	1	380 to 810	Yes	PCSP20-E3	Internal 2-channel Half Bridge Driver
NJW4814	Step-Up	Internal FET	2.7 to 5.5	1.5	380 to 1000	Yes	EQFN24-LE	Internal 2-channel Half Bridge Driver

Switching Regulators (Inverting)

Part No.	Application	SW. Device	Operating Voltage [V] min./max.	Switching Current [A] min.	Oscillation Frequency Range [kHz] min./max.	Stand-by Function	Package Outline	Notes
NJM2344	Step-Down/ Step-Up/ Inverting	Internal Tr.	3 to 40	1.5	1 to 150	Yes	DIP8 DMP8	The NJM2392 with standby function
NJM2374A	Step-Down/ Step-Up/ Inverting	Internal Tr.	2.5 to 40	1.5	0.1 to 100		DIP8 DMP8 SOP8 JEDEC 150mil SSOP14	PWM control version of the NJM2360
NJM2392	Step-Down/ Step-Up/ Inverting	Internal Tr.	3 to 40	1.5	1 to 150		DIP8 DMP8	PWM control version of the NJM2360
NJW4153	Step-Down/ Inverting	Internal FET	4.6 to 40	1	1000(Fixed)	Yes	SOT-89-5-2 DFN8-V1	

Termination Regulator

Part No.	Key Features	Operating Voltage [V] min./max.	Package Outline	Notes
NJW4118T1	±2.0A DDR Termination Regulator	2.7 to 5.5	EQFN16-JE	VREF Voltage Accuracy VDDQ×0.49 to 0.51V VTT Voltage Accuracy VREF±40mV

Battery Charger ICs

Part No.	Key Features	Operating Voltage [V] min./max.	Quiescent Current [mA] typ.	Package Outline	Notes
NJM2146B	Constant Voltage, Constant Current Control	2.5 to 18	1	DIP8 DMP8 MSOP8(VSP8)	$V_{REF}=1.5V\pm 1\%$ $V_{IO}=2mV$
NJM2336	Constant Voltage, Constant Current Control	2.2 to 13	0.2	SOT-23-6-1	$V_{REF}(A)=A$ version=75mV B version=109mV C version=151mV $V_{REF}(B)=1.24V\pm 1\%$
NJM2337	Constant Voltage, Constant Current Control	2.2 to 13	0.2	SOT-23-6-1	$V_{REF}(A)=A$ version=75mV B version=109mV C version=151mV $V_{REF}(B)=1.24V\pm 1\%$
NJM2346	Constant Voltage, Constant Current Control	2.2 to 13	0.25	DMP8 MSOP8(TVSP8)	$V_{REF}=1.24V\pm 1\%$ $V_{IO}=0.5mV$
NJW4100	Lithium-ion Battery Charger Controller with Timer 1cell/2cell Charge protective function	2.4 to 14	2	DMP20 SSOP20	
NJW4108	Lithium-ion Battery Charger Controller with Timer Adjustable Charge Voltage Adjustable Pre-Charge and Full Charge Current	to 14	2	SSOP20	
NJW4120	Lithium-ion Battery Charger Controller with Timer 1cell/2cell Charge protective function Charge Control Feedback by Photocoupler	2.7 to 14	2	DMP20 SSOP20	
NJW4124	Lithium-ion Battery Charger Controller with Timer 1/cell 2/cell Internal Re-Charge function Charge Control Feedback by Photocoupler	2.7 to 14	2	DMP20	

Switching Drivers (Gate Drivers)

Part No.	Channels	Operating Voltage [V] min./max.	UVLO	Operating Temperature Range [°C]	Output Peak Current [A]	Output Rise Time [nsec] typ.	Output Fall Time [nsec] typ.	Key Features	Package Outline
NJW4840	1	8 to 20	Yes	-40 to 105	±4	27.5	27.5	Built-in Thermal Shut Down Under Voltage Lockout Short Circuit Protection (power/ground fault)	MSOP8(VSP8)
NJW4841	1	4 to 20	Yes	-40 to 85	±2	25	20	Built-in Thermal Shut Down Under Voltage Lockout	MSOP8(VSP8)
NJW4860	2	4 to 20	Yes	-40 to 125	±1	15	15	Built-in Thermal Shut Down Under Voltage Lockout LDO	HSOP8-M1 DFN8-V1

Switching Drivers (Half/Full Bridge Drivers)

Part No.	Channels	Operating Voltage [V] min./max.	UVLO	Operating Temperature Range [°C]	Output Peak Current [A]	Output Rise Time [nsec] typ.	Output Fall Time [nsec] typ.	Fault	Key Features	Package Outline
NJW4801	1(Half)	8 to 35	Yes	-40 to 85	±0.45	5	5	Yes	35V/450mA Half Bridge Driver(P/N ch.)	MSOP8(VSP8)
NJW4810A	2(Half)	8 to 40	Yes	-40 to 85	±1	3	5	Yes	Dual Half Bridge Driver	HSOP8-M1
NJW4813	2(Half)	2.7 to 5.5 (V_{DD_SW}) 8 to 35 (V_{DD_HB})	Yes	-40 to 85	+0.28 /-0.25	400	400	Yes	Dual Half Bridge Driver with Boost Converter	PCSP20-E3
NJW4814	4(Half)	2.7 to 5.5 (V_{DD_SW}) 7 to 35 (V_{DD_HB})	Yes	-40 to 85	±0.3	400	340	Yes	Dual Half Bridge Driver with Boost Converter	EQFN24-LE

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Switching Drivers (High Side Switches/ Low Side Switches)

Part No.	Channels	Drain -Source Voltage max. [V]	UVLO	Operating Temperature Range [°C]	Input Voltage [V] min./max.	Input Current [uA]	Drain Current [A]	On-Resistance [ohm]	Function	Package Outline
NJW4820	1	40		-40 to 85	2.64 to 5.5	80	0.5	0.27	Low Side Switch(N ch.)	SOT-23-5
NJW4822	1	40		-40 to 125	2.64 to 5.5	160	0.2	1.1	Low Side Switch (N ch.)	DFN6-H1
NJW4828-A	8		Yes(POR)	-40 to 125	4 to 5.5		0.6	0.9	8-channel Parallel Input Parallel Output	SDIP22
NJW4828-B	8		Yes(POR)	-40 to 125	3 to 5.5		0.3	0.9	8-channel Parallel Input Parallel Output	HTSSOP24-P1
NJW4830	1	40		-40 to 85	2.64 to 5.5	150	0.5	0.35	High Side Switch(P ch.)	SOT-89-5-2
NJW4832	1	40		-40 to 125	2.64 to 5.5	150	0.2	0.75	High Side Switch (P ch.)	DFN6-H1

Charge Pumps

Part No.	Output Function	Operating Voltage [V] min./max.	Output Resistance [ohm] max.	Oscillation Frequency [kHz] typ.	Quiescent Current [mA] max.	Package Outline	Notes
NJU7660A	For Negative voltage converter For Twofold voltage converter	1.5(Negative) 3(Twofold) to 10	100	5	0.13	DMP8 SSOP8	
NJU7665A	Inverting type	1.5 to 5.5	1000	7.5	0.1	SOT-23-5	
NJU7665B	Inverting type	1.5 to 5.5	100	75	0.65	SOT-23-5	
NJU7665C	Inverting type	1.5 to 5.5	75	150	1.4	SOT-23-5	
NJU7670	Duble Inverting Tripple Inverting	1.5 to 10	14	2.5	0.12	DIP14 DMP14 SSOP14	
NJW4190	Doubler type	5 to 17	42	300	1.25	MSOP8(VSP8) DMP8	Maximum Output Voltage 34V ON/OFF Function
NJW4191	Inverting type	4.7 to 17	34	300	1.22	MSOP8(VSP8) DMP8	Maximum Output Voltage -17V ON/OFF Function

DSC (Digital Signal Controller) for Digital Controlled Power Supply

Part No.	Supply Voltage [V]	CPU	Memory	AD Converter	PWM	Interface	I/O Port	Other	Package Outline
NJU20010	Core:1.8 I/O:3.3	16bit/ 62.5MHz 6-stage pipeline	Flash ROM 16kW	12bit/ 2Msps/ 12ch.(SAR)	1ns / 8-Output/ 4ch.	UART/SPI/ i ² C	20-ports	3-Comparators	LQFP52-H2
NJU20011	Core:1.8 I/O:3.3	16bit/ 62.5MHz 6-stage pipeline	Flash ROM 16kW	12bit/ 2Msps/ 12ch.(SAR)	1ns / 8-Output/ 4ch.	UART/SPI/ i ² C	20-ports	3-Comparators	LQFP64-H2
NJU20300	3.3	16bit/ 31.25MHz 4-tage pipeline	OTP ROM 8kW	10bit/ 1Msps/ 8ch.(SAR) 6bit/ 6Msps/ 4ch. (Differential)	2.5ns / 6-Output/ 3ch. (with 1ns Delay)	UART/SPI/ i ² C	12-ports	3-Comparators with 2-DAC Built-in oscillator	LQFP48-R3
NJU20301	3.3	6bit/ 31.25MHz 4-tage pipeline	OTP ROM 8kW	10bit/ 1Msps/ 8ch.(SAR) 6bit/ 6Msps/ 4ch. (Differential)	2.5ns / 6-Output/ 3ch. (with 1ns Delay)	UART/SPI/ i ² C	12-ports	3-Comparators with 2-DAC Built-in oscillator	QFL36-B2

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Audio & Video ICs

Audio Amplifiers (High Quality Audio Operational Amplifiers)

Part No.	No. of Circuit	Power Supply	Supply Voltage [V] min./max.	I _{cc} /ch. [mA] typ.	V _{IO} [mV] max.	I _B [nA] typ.	I _O [nA] typ.	SR [V/μsec] typ.	GBW [MHz] typ.	f _r [MHz] typ.	Noise V _{NI} /en typ.	Package Outline	Notes
MUSES01	2	Dual	±9 to ±16	4.25	5	0.2	0.1	12	3.3	3	1.2, 9.5	DIP8	THD(typ.)=0.002% J-FET Input
MUSES02	2	Dual	±3.5 to ±16	4	3	100	5	5	11	5.8	0.8, 4.5	DIP8	THD(typ.)=0.001% Bipolar Input
MUSES03	1	Dual	±3.5 to ±18	5.8		0.005	0.002	35	12	13	1, 7.5	DIP8	THD(typ.)=0.00003% J-FET Input
MUSES8820	2	Dual	±3.5 to ±16	4	3	100	5	5	11	5.8	0.8, 4.5	DIP8 SOP8 JEDEC 150mil	THD(typ.)=0.001% Bipolar Input
MUSES8832	2	Dual	±1.35 to ±7	3.75	0.5	4000	100	1	10		0.3, 2.1	SOP8 JEDEC 150mil SSOP8-A3 DFN8-W1	THD(typ.)=0.0009% Bipolar Input Rail to Rail Output
MUSES8920	2	Dual	±3.5 to ±17	4.5	5	0.005	0.002	25	11	10	1.1, 8	DIP8 SOP8 JEDEC 150mil DFN8-X7	THD(typ.)=0.0004% J-FET Input
NJM8801	2	Dual	±2 to ±18	3	3	100	5	5	15		0.8, 4.5	SOP8 JEDEC 150mil SSOP8-A3	THD(typ.)=0.0005% Bipolar Input

Audio Amplifiers (Power Amplifiers/ Headphone Amplifiers)

Part No.	Operating Voltage [V] min./max.	Channel	Output Power			Stand-by Function	Mute	Key Features	Package Outline
			P _o	V ⁺	R _L				
NJM2113	2 to 16	BTL 1ch.	400mW min.	12	100	Yes	Yes	Low Voltage Operation	DIP8 DMP8 SOP8 JEDEC 150mil SIP8 SSOP8 MSOP8(VSP8)
NJM2135	2 to 16	BTL 1ch.	400mW min.	12	100	Yes	Yes	Low Voltage Operation	DIP8 DMP8 SIP8 SSOP8 MSOP8(VSP8)
NJM2149	2 to 6	BTL 1ch.	250mW min.	6	32	Yes	Yes	Low Voltage Operation	DIP8 DMP8 SSOP8 MSOP8(TVSP8) MSOP8(VSP8)
NJM2151A	2.7 to 8.5	BTL 1ch(SP) 2ch.(HP)	50mW typ.	5	8	Yes	Yes	Electronic Volume	DMP20 SSOP20-F1 SSOP20
NJM2166	2.7 to 8.5	BTL 1ch.	500mW typ.	5	8	Yes	Yes	Electronic Volume	SSOP14 MSOP10(VSP10)
NJM2768B	2.8 to 5.5	2ch.	100mW typ.	5	16		Yes	Fixed Gain 0dB typ.	DMP8 MSOP8(TVSP8)
NJM2769B	2.8 to 5.5	2ch.	100mW typ.	5	16		Yes	Fixed Gain 6dB typ.	DMP8 MSOP8(TVSP8)
NJM2770	2 to 4.5	BTL 1ch.	250mW typ.	3	8	Yes	Yes	Low Voltage Operation	MSOP8(TVSP8) MSOP8(VSP8)
NJM2775A	1.8 to 6	BTL 1ch(SP) 1ch.(Pre)	500mW typ.	4	8			Auto level control (ALC) function	DMP16
NJM2776	1.8(V ⁺ 1) to 4.5 0.9(V ⁺ 2) to 4.5	2ch.	8.5mW typ.	2.3	16	Yes	Yes	Low Voltage Operation	MSOP10(TVSP10)
NJM2777	8 to 10	2ch.	100mW typ.	9	100		Yes	Electronic Volume	DIP14 DMP14 SSOP14
NJU7082B	2.4 to 5.5	2ch.				Yes			DMP8 SSOP8

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Audio Amplifiers (Power Amplifiers/ Headphone Amplifiers)

Part No.	Operating Voltage [V] min./max.	Channel	Output Power			Stand-by Function	Mute	Key Features	Package Outline
			P _o	V ⁺	R _L				
NJU7084	2.8 to 5.5	BTL 1ch.	1W typ.	5	8	Yes	Yes		MSOP8(VSP8)
NJU7085	2.8 to 5.5	BTL 2ch.	400mW typ.	3	4	Yes	Yes	surround sound technology	PCSP32-F7 SSOP32
NJU7086	2.8 to 5.5	BTL 2ch.	1W typ.	5	8	Yes	Yes	Three input selector Electronic volume	LQFP48-R3
NJU7089	1.8 to 5.5	BTL 1ch.	1.2W typ.	5	8	Yes	Yes	Low Operating Voltage Single-end /Differential Input	DFN8-V1 SSOP20-C3 MSOP8(VSP8) HTSSOP24-P1
NJU72040	2.7 to 3.6	2ch.	80mW typ.	3.3	32		Yes	Output Coupling Capacitor-less Single-end/Differential Input Gain(+6.4dB/+12.4dB (R _L =32ohm), +7.1dB/+13.1dB (R _L =10kohm) 2Vrms output(R _L =10kohm)	SSOP14
NJU72060	2.7 to 5.5	BTL 1ch.	500mW typ.	5	8	Yes	Yes	Single-end/Differential Input	MSOP8(VSP8) HSOP8-M1 DFN8-V1
NJU72065	2.7 to 5.5	BTL 1ch.	1.2W typ.	5	8	Yes	Yes	Volume Single-end/Differential Input	MSOP10(TVSP10) SSOP20-C3
NJW1109	7.5 to 10	2ch.	100mW typ.	9	100		Yes	Electronic Volume I ² C Bus Interface	DIP14 DMP14 SSOP14

Audio Amplifiers (Class D Amplifiers)

Part No.	Operating Voltage [V] min./max.	Channel	Input Signal	Output Voltage					Output Filter-less	Stand-by Function	Key Features	Package Outline
				P _o	V _{om}	V ⁺ [V]	R _L [ohm]	C _L [nF]				
NJU72501	2.3 to 5	BTL 1ch.	PWM/PDM		18Vpp typ.	3		15		Yes	Adjust Output Voltage	EQFN12-JE EQFN16-G2 SSOP14
NJU8754	2.7 to 5.25	BTL 1ch.	Analog	1.2W typ.		5	8			Yes		QFN20-M1 SSOP10
NJU8758	1.8 to 5.5	BTL 1ch.	Analog	1.5W typ.		5	8		Yes	Yes		SSOP14
NJU8759	1.8 to 5.5	BTL 1ch.	Analog	3W typ.		5	4		Yes	Yes	Single-end input Differential input corresponds	WCSP9
NJU8789	1.8 to 4.5	BTL 1ch.	PWM/PDM	500mW typ.		3.3	8			Yes		SSOP10

Audio Amplifiers (Line Amplifiers)

Part No.	Operating Voltage [V] min./max.	Channel	Voltage Gain	Output Voltage			Output Coupling Capacitor-less	Pop Noise Suppression Circuit	Mute	Key Features	Package Outline
				V _{om}	V ⁺ [V]	R _L [ohm]					
NJM2160B	6 to 12	2ch.	+8dB typ.	5.2Vrms typ.	9	10k					DMP16 SSOP16
NJM2792	6 to 11	4ch.	+8dB typ.	5.2Vrms typ.	9	10k					SSOP20
NJU72013	2.7 to 3.6	2ch.	+6.2dB typ.	2.3Vrms typ.	3.3	47k	Yes	Yes	Yes		MSOP10(TVSP10)
NJU72014	2.7 to 3.6	2ch.	+10.5dB typ.	2.3Vrms typ.	3.3	47k	Yes	Yes	Yes		MSOP10(TVSP10)
NJU72015	3 to 3.6	2ch.	Adjustable type	2.3Vrms typ.	3.3	10k	Yes	Yes	Yes		SSOP14
NJU72040	2.7 to 3.6	2ch.	+7.1dB typ. +13.1dB typ.	2.2Vrms typ.	3.3	32	Yes	Yes	Yes	Output Coupling Capacitor-less Single-end/Differential Input Gain(+6.4dB/+12.4dB (R _L =32ohm), +7.1dB/+13.1dB (R _L =10kohm) 2Vrms output(R _L =10kohm)	SSOP14

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Audio Amplifiers (Line Amplifiers)

Part No.	Operating Voltage [V] min./max.	Channel	Voltage Gain	Output Voltage			Output Coupling Capacitor -less	Pop Noise Suppression Circuit	Mute	Key Features	Package Outline
				V _{om}	V ⁺ [V]	R _L [ohm]					
NJW1230	2.7 to 3.6	2ch.(Audio) 1ch.(Video)	+6.2dB typ.	2.2Vrms typ.	3.3	47k	Yes	Yes		Audio: Ground Referenced Output Video: AC or DC Coupling Output	SSOP16
NJW1240	6 to 10	6ch.	+6dB typ. +8.3dB typ.	5Vrms min.	8	47k	Yes	Yes	Yes		SSOP32
NJW1241	6 to 10	BTL 3ch.	+12dB typ. +16dB typ.	10Vrms min.	8	47k	Yes	Yes	Yes		SSOP32

Audio Amplifiers (Microphone Amplifiers)

Part No.	Operating Voltage [V] min./max.	Channel	Voltage Gain	Mute	Key Features	Package Outline	Notes
NJD2201	1 to 10	1ch.	-4dB typ.		For ECM, THD (0.1% typ.)	DFN4-E1	
NJM2173A	2.7 to 4.5	2ch.	+13dB typ. +29dB typ.	Yes	Built-in Regulator for Microphone	SSOP14	
NJM2781	2.7 to 4.5	1ch.	Adjustable type		Built-in Regulator for Microphone	SSOP8 MSOP8(TVSP8)	
NJM2783	2.7 to 13	1ch.	+20 to +63dB		Auto level control (ALC) function	SSOP14	
NJM2795	4.3 to 20	2ch.	+6 to +52dB		CMRR=80dB typ.	SSOP14	
NJU7907A	4.5 to 16	1ch.	+24 to +40dB		2-Wire	EPFFP10-C4 MSOP10(TVSP10)	

Audio Amplifiers (Isolation Amplifiers)

Part No.	Operating Voltage [V] min./max.	Channel	Voltage Gain	Key Features	Package Outline	Notes
NJM2754	4.7 to 12	2ch. (4-Input,1-Output)	0dB typ.	CMRR=60dB typ.	SSOP20	
NJM2794	4.3 to 13	2ch.	0dB typ.	CMRR=60dB typ.	SSOP14 MSOP10(TVSP10)	
NJM2795	4.3 to 20	2ch.	+6 to +52dB	CMRR=80dB typ.	SSOP14	

Audio Signal Processing (Electronic Volumes)

Part No.	Operating Voltage [V] min./max.	Ch.	Volume Range	Tone Control	Input Selector	Control	Function	Package Outline
NJM2172	2.7 to 5.5	2	-3 to -95dB			DC Control	Include OpAmp	SSOP14
NJU72340A	±4.5 to ±7.5	8	+31.5 to -95dB (0.5dB step)		8-input/2-Output (Stereo:7 Mono:1)	Two-wired Serial	Multi-Channel Selector REC Out	LQFP52-H3
NJU72341	4.5 to 14.5	2	0 to -95dB (1dB step)			I ² C BUS	Zero Cross Detection	SSOP14
NJU72342	4.5 to 14.5	4	0 to -95dB (1dB step)			I ² C BUS	Zero Cross Detection	SSOP14
NJU72343	±4.5 to ±7.5 9 to 15	8	+31.5 to -95dB (0.5dB step)		2-input (4 of 8-channels)	Two-wired Serial	Zero Cross Detection	SSOP32
NJU72344	±4.5 to ±7.5	2	0 to -95dB (1dB step) 0,+3,+6,+12,+18,+24			Two-wired Serial	Zero Cross Detection	SSOP14

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Audio Signal Processing (Electronic Volumes)

Part No.	Operating Voltage [V] min./max.	Ch.	Volume Range	Tone Control	Input Selector	Control	Function	Package Outline
NJU7391A	4.7 to 9.7	2	0 to -95dB (1dB step)	2-Band 0 to ±14dB (2dB step)	Stereo 5-input/1-Output	Three-wired Serial	eala Surround	SSOP32
NJU7392	2.7 to 5.5	2	0 to -68dB		2-input/1-output (Differential 1/ Single end 1)	Push Button	eala Stereo Expander Bass Boost	SSOP32
NJU7394	2.7 to 5.5	2	+6 to -62dB			Push Button	Standby	SSOP20-C3
NJW1119A	±4.5 to ±7.5	2		0 to ±12dB (1dB step)		Three-wired Serial		SSOP32
NJW1159	±4.5 to ±7.5	2	0 to -95dB (1dB step)			Three-wired Serial	Selectable external OP Amp	DIP16 DMP16 SSOP16
NJW1184	7.5 to 13	4	0 to -100dB (0.5dB step)			I ² C BUS	VCA Volume	DMP20
NJW1190	8 to 13	2	0 to -44dB	3-Band 0 to ±14dB (2dB step)	Stereo 5-input/1-Output	I ² C BUS	Surround Bass Boost	SSOP44
NJW1192	7.5 to 13	4	+6 to -30dB (1dB step) -30 to -68dB (2dB step)	2-Band 0 to ±14dB (2dB step)	Stereo 3-input (Mono 1-input/1-Output)	I ² C BUS	Loudness	SSOP32
NJW1194	±4.5 to ±7.5	2	+31.5 to -95dB (0.5dB step)	2-Band 0 to ±10dB (1dB step)	Stereo 4-input/1-Output	Three-wired Serial		SSOP32
NJW1195A	±3.5 to ±7.5 7 to 15	4	+31.5 to -95dB (0.5dB step)		Stereo 4-input/2-Output (Stereo 4-input/1-Output) (Differential 2-input/1-Output)	Three-wired Serial	Zero Cross Detection Differential transmission select function	SSOP32
NJW1200	2.7 to 5.5	2	0 to -78dB (2dB step)		Differential 2-input/1-Output	I ² C BUS	eala Surround Bass Boost	SSOP32
NJW1201A	7.5 to 10	2	0 to -90dB	0 to ±14dB (2dB step, Treble, Middle) 0 to ±17.5dB (2.5dB step, Bass)	6-input/1-output (Differential 1/ Single end 5)	I ² C BUS	eala Surround Bass Boost	LQFP52-H2
NJW1298	±4.5 to ±7.5	8	+31.5 to -95dB (0.5dB step)		Stereo 13-input/4-output (8ch. 2-input/1-output)	Three-wired Serial	Multi-Channel Selector REC Out	QFP100-U1

Audio Signal Processing (Audio Processors)

Part No.	Function	Operating Voltage [V] min./max.	Input [ch.]	Output [ch.]	New JRC's Original Surround			License			Aux Input	Aux Output	Package Outline
					eala	Base Boost	Simulated Surround	BBE	SRS 3D Stereo	SRS TruSurround			
NJW1142A	3channel Output(Lch, Rch, Line output)	8 to 10	4(x2)	3	Yes		Yes						SSOP32
NJW1143A		8 to 13	2	2	Yes		Yes				2		SSOP32
NJW1146A	3channel Output(Lch, Rch, Low Pass Filter ch)	8 to 13	2	3	Yes		Yes	Yes			2		SSOP32
NJW1163	3channel Output(Lch, Rch, Subwoofer ch)	7.5 to 13	2	3	Yes	Yes	Yes				2		SSOP32
NJW1173		8 to 13	2	2	Yes		Yes			2	2		SSOP20
NJW1185	Voice Enhancement, I ² C Bus Ineter Face	7.5 to 13	6	1	Yes		Yes						SSOP32
NJW1190	MIC.IN(Monaural), I ² C Bus Ineter Face	8 to 13	5	2	Yes	Yes							SSOP44

Audio Signal Processing (3D Surround & Sound Enhancement ICs)

Part No.	Function	Key Features	Operating Voltage [V] min./max.	Package Outline	Notes
NJM2150	Sound Enhancement Audio Processor	BBE	4.5 to 13	DMP20 SSOP20	
NJM2150A	Sound Enhancement Audio Processor	BBE	4.5 to 13	DMP20 SSOP20	
NJM2153	Sound Enhancement Audio Processor	BBE Professional	±9 to ±18	DMP20	

Audio Signal Processing (3D Surround & Sound Enhancement ICs)

Part No.	Function	Key Features	Operating Voltage [V] min./max.	Package Outline	Notes
NJM2190	SRS Headphone Surround Processor	SRS Headphone	4.7 to 13	DIP16 DMP16 SSOP16	
NJM2194	SRS Dialog Clarity Processor	SRS Dialog Clarity	4.7 to 13	DIP14 DMP14	
NJM2195	SRS WOW Audio Processor	SRS WOW	4.7 to 13	SSOP44	
NJM2199	SRS 3D Audio Processor	SRS 3DStereo	4.7 to 13	DMP14 SSOP14	
NJM2702	3D Surround	eala Stereo	4.7 to 13	DIP14 DMP14 SSOP10	
NJM2703	Headphone Surround	eala Headphone	1.8 to 6	MSOP10(TVSP10)	
NJM2706	3D Surround & Dynamic Bass Boost	eala, eala BASS	4.7 to 13	SSOP24-E1	

DSPs

Part No.	Sound Function	Package Outline	Notes
NJU26040-07A	eala/ ealaBASS/ AGC/ HPF/ LPF/ Tone Control/ Volume	SSOP32	
NJU26040-08B	SRS 3D/ TruBass/ FOCUS/ BBE/ AGC/ LPF/ HPF/ Tone Control/ Volume	SSOP32	
NJU26040-09B	WOW HD/ TruBass/ FOCUS/ Volume	SSOP32	
NJU26040-09D	WOW HD/ TruBass/ FOCUS SRS 3D/ SRS TruSurround HD/ HD4	SSOP32	
NJU26040-16A	eala/ eala Stereo Expander/ AGC/ Dynamic Bass Boost/ PEQ/ Limiter	SSOP32	
NJU26040-18A	eala/eala Rebirth/eala Stereo Expander/Stereo 128 tap FIR filter(LPC)/Simplified passive matrix 6 channels output	SSOP32	
NJU26041-01A	eala/ eala BASS/ Dialogue Boost/ 3Bands 2stage AGC/ Tone	SSOP32	
NJU26060-03A	TruVolume/ WOW HD	SSOP44	
NJU26060-04A	eala/eala Rebirth/eala Stereo Expander/256Taps FIR Filter/DBB (Dynamic Bass Boost)/BEEP	SSOP44	
NJU26060-05A	Stereo Expander II/Elevation/256Taps FIR Filter/8Band IIR Filter/DBB (Dynamic Bass Boost)/DRC/BEEP	SSOP44	
NJU26060 Series	Sound customizing is easy by One-Time Programmable Memory.	SSOP44	
NJU26123	3D sound/ Dialogue Boost/ Bass Enhance/ Lip sync Audio Delay/ PEQ/ HPF/ LPF/ DRC/ Tone	SSOP24-C2	
NJU26124	512TAP FIR Filter/ PEQ/ Time Alignment Delay	SSOP24-C2	
NJU26125	Seat Positioning Surround (New JRC Original) Car Surround/ Elevation/ Bass Enhance/ 7Band PEQ	SSOP24-C2	
NJU26126	eala/ eala Rebirth/ Dynamic Bass Boost (New JRC Original)/ HPF/ LPF/ 10Band PEQ/ DRC (Dynamic Range Compression)/ Delay(Fs=48kHz max. 22msec)	SSOP24-C2	
NJU26202	SRS CS Auto/ TruBass/ Focus/ Hall Simulator/ 7band PEQ/ GEQ	LQFP48-R3	
NJU26203A	Dolby PLII/ 5Band PEQ (7ch.)	SSOP44	
NJU26206	Dolby Pro Logic IIx/ Virtual Dolby Surround/ BM/ PEQ	SSOP44	
NJU26207	Dolby Volume	SSOP44	
NJU26208	Circle Surround Automotive/ Circle Surround II 5.1/ TruSurroundXT/ TruBass/ FOCUS/ Mono-To-Stereo	SSOP44	
NJU26209	Dolby Pro Logic II/ DAEP/ Bass Management	SSOP44	
NJU26220	Dolby Virtual Speaker/ Dolby Headphone/ ProLoogic II	LQFP48-R3	
NJU26226	Dolby Pro Logic IIx/ Dolby Virtual Speaker/ Dolby Headphone/ Bass Management/ Delay	SSOP44	
NJU26901	Delay (128ms at fs=32KHz 85ms at fs=48KHz)	DMP8	
NJU26902	Delay (128ms at fs=32KHz 85ms at fs=48KHz)	SSOP20	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Audio Switches

Part No.	Function	Operating Voltage [V] min./max.	Input	Output	Package Outline	Notes
NJM2750	Stereo Audio Selector	4.7 to 13	4	1	DMP16	
NJM2752	Stereo Audio Selector	4.7 to 10	2	1	SSOP14 MSOP10(TVSP10)	
NJM2753	Stereo Audio Selector	4.7 to 10	3	1	SSOP14	
NJM2754	Stereo Audio Selector With Ground Noise Isolation Amplifier	4.7 to 12	4	1	SSOP20	CMRR=60dB typ.
NJM2755	Stereo Audio Selector	4.7 to 10	4	1	SSOP16	
NJU72750A	Stereo Analog Switch 2-wired Serial BUS Control	±4.5 to ±7.5 9 to 15	7	3	SSOP32	
NJU72751A	Stereo Analog Switch 2-wired Serial BUS Control	±4.5 to ±7.5 9 to 15	4	4	SSOP32	
NJW1110	Stereo Audio Selector I ² C Bus Interface Gain Control	7.5 to 15	9	3	SSOP32	
NJW1111	Stereo Audio Selector Three-wired Serial Gain Control	±4.5 to ±7.5	9	3	SSOP32	
NJW1112	Stereo Audio Selector Three-wired Serial Output switch	±4.5 to ±7.5	8	4	SSOP32	
NJW1156A	Stereo Audio Selector I ² C Bus Interface Gain Control	4.75 to 13	5	1	SSOP20	

Video Amplifiers

V: Composite Video Signal S: S-Video Signal(Y/C) C: Component Signal(Y/Pb/Pr)/RGB Signal

Part No.	Function	Operating Voltage [V] min./max.	Ch.	Input			Output			Gain [dB]	LPF	75ohm Driver	Package Outline
				V	S	C	V	S	C				
NJM2274	Low Operating Voltage Y/C MIX Sag Correction	2.8 to 5.5	1		1		1		12		Yes	MSOP8(VSP8)	
NJM2274A	Low Operating Voltage Y/C MIX Sag Correction	2.8 to 5.5	1		1		1		6		Yes	MSOP8(VSP8)	
NJM2504	Video Differential Transmission Single-end Input Differential Output	4.5 to 9	1	1			2		6		Yes	MSOP8(TVSP8)	
NJM2505A	Isolation Amplifier	4.5 to 9	1	1			1		0			SOT-23-5	
NJM2507	Video Differential Transmission Differential Input Single-end Output	4.5 to 9	1	2			1		6 (Reverse phase)		Yes	MSOP8(TVSP8)	
NJM2512	Low Operating Voltage 47uF AC-Coupling Capacitor	3 to 6	1	1			1		6	6th order	Yes	MSOP8(TVSP8)	
NJM2512A	Low Operating Voltage 47uF AC-Coupling Capacitor	3 to 6	1	1			1		12	6th order	Yes	MSOP8(TVSP8)	
NJM2515	Wide frequency range 3-input 1-output	4.5 to 5.5	3			3		1	6	Bypass 13.5MHz	Yes	SSOP32	
NJM2516	47uF AC-Coupling Capacitor Sag Correction Wide band	4.5 to 9.5	3			1		1	6	4th order	Yes	SSOP20-C3	
NJM2538	Y/C MIX Sag Correction	4.5 to 5.3 2.7 to 5.3	3		1		1	1	6	4th order	Yes	SSOP20	
NJM2559	Output Capacitor-less (0.5V DC Output) Power Supply Short-circuit Protection	4.5 to 5.5	1	1			1		12	6th order	Yes	MSOP8(TVSP8)	
NJM2561	Low Operating Voltage Sag Correction	2.8 to 5.5	1	1			1		6	6th order	Yes	DFN6-G1 SOT-23-6-1	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Video Amplifiers

Part No.	Function	Operating Voltage [V] min./max.	Ch.	Input			Output			Gain [dB]	LPF	75ohm Driver	Package Outline
				V	S	C	V	S	C				
NJM2561A	Low Operating Voltage Sag Correction DC Coupling Screening Type	2.6 to 5.5	1	1			1			6	6th order	Yes	DFN6-G1
NJM2561B	DC Coupling Screening Type	2.6 to 5.5	1	1			1			6	6th order	Yes	SOT-23-6-1
NJM2562	Low Operating Voltage Sag Correction	2.8 to 5.5	1	1			1			12	6th order	Yes	SOT-23-6-1
NJM2563	Low Operating Voltage Sag Correction	2.8 to 5.5	1	1			1			16	6th order	Yes	SOT-23-6-1
NJM2564	Dual Supply Voltage Y/C MIX Wide band	2.8 to 3.5 4.5 to 5.5 -5.5 to -2.8	6		1	1	1	1	1	6	4th order	Yes	SSOP32
NJM2565	Sag Correction Y/C MIX Wide band	4.5 to 5.5	6		1	1	1	1	1	6	2nd order	Yes	SSOP32
NJM2566A	DC Interface for S2,RGB In Y/C MIX Wide band	4.5 to 5.5	6	1	1	1	1	1	1	6	4th order	Yes	SSOP32
NJM2567	Low Operating Voltage Y/C MIX Sag Correction	2.8 to 5.5	3		1		1	1		6	6th order	Yes	SSOP14
NJM2570A	Y/C MIX Sag Correction DC Output for Aspect Ratio	4.5 to 5.5	3		1		1	1		12	6th order	Yes	SSOP16
NJM2573	Low Operating Voltage CLAMP/BIAS Switch Sag Correction	2.8 to 5.5	3	1	1		1	1		6	2nd order	Yes	SSOP14
NJM2574	Low Operating Voltage CLAMP/BIAS Switch LPF/Through Switch	2.8 to 5.5	1	1			1			12	3rd order Bypass	Yes	MSOP8(TVSP8)
NJM2575	Low Operating Voltage Sag Correction	2.8 to 5.5	1	1			1			6	2nd order	Yes	SOT-23-6-1
NJM2577	High-Z Output Control	±4.5 to ±5.5	4	1		1	1		1	6	5th order	Yes	DMP20
NJM2580	High Definition Sag Correction	4.5 to 5.5	3			1			1	6		Yes	DIP14 DMP14 SSOP14
NJM2581	High Definition Dual Voltage	±4.5 to ±5.5	3			1			1	6		Yes	DIP14 DMP14
NJM2582	DC Output for SCART	4.5 to 5.5 -5.5 to -4.5 10.5 to 11.5	4	1	1	1	1	1	1	6	3rd order	Yes	SSOP32
NJM2583A	High Definition Sag Correction Y/C MIX	4.5 to 5.5	6		1	1	1	1	1	6	4th order	Yes	SSOP32
NJM2589	LPF for 480p Sag Correction	4.5 to 5.5	6	1	1	1	1	1	1	6	4th order	Yes	SSOP32
NJM41005T	Isolation Amplifier with Video Driver	4.5 to 5.5	1	1			1			0		Yes	SOT-23-5
NJM41030	3dB Gain	4.5 to 5.5	1	1			1			3			SOT-23-6-1
NJM41031	Sag Correction	4.5 to 5.5	1	1			1			6	6th order	Yes	SOT-23-6-1
NJM41033	Low Operating Voltage Isolation Amplifier	2.6 to 5.5	3	3		1	3		1	0			SSOP14
NJM41035	Low Operating Voltage Isolation Amplifier Gain Adjust	2.7 to 9.5	1	1			1			ADJ	6th order		MSOP8(TVSP8)
NJM41041	High Definition Y/C MIX	4.5 to 5.5	4	1	1	1	1		1	6	2nd order(SD) 3rd order(HD)	Yes	SSOP20-C3
NJM41042	High Definition Auto Power Save DC-Coupling	4.5 to 5.5	4	1		1	1		1	6	2nd order(SD) 3rd order(HD)	Yes	SSOP20-C3

Note) MSOP8(TVSP8) : MEET JEDEC MO-187-DA / MSOP10(TVSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Video Amplifiers

V: Composite Video Signal S: S-Video Signal(Y/C) C: Component Signal(Y/Pb/Pr)/RGB Signal

Part No.	Function	Operating Voltage [V] min./max.	Ch.	Input			Output			Gain [dB]	LPF	75ohm Driver	Package Outline
				V	S	C	V	S	C				
NJM41045	High Definition Wide band(to 400MHz)	4.5 to 9.5 ±3 to ±5	3			1			1	6		Yes	SSOP20-C3
NJU71031	Low Operating Voltage Output Capacitor-less (0V DC Output)	2.5 to 3.45	1	1			1			6	3rd order	Yes	MSOP8(TVSP8) DFN8-U1
NJU71032	Low Operating Voltage Output Capacitor-less (0V DC Output)	2.5 to 3.45	1	1			1			12	3rd order	Yes	MSOP8(TVSP8)
NJU71041	Output Capacitor-less(0V DC Output) Coaxial Receiver	2.5 to 3.45	1	1			1			6	3rd order	Yes	MSOP10(TVSP10)
NJU71042	Output Capacitor-less(0V DC Output) Coaxial Receiver	2.5 to 3.45	1	1			1			12	3rd order	Yes	MSOP10(TVSP10)
NJU71044	Output Capacitor-less(0V DC Output) Coaxial Receiver	2.5 to 3.45	1		1		1			12	3rd order	Yes	MSOP10(TVSP10)
NJU71074	Y/C MIX Output Capacitor-less(0V DC Output)	2.5 to 3.45	1		1		1			12	3rd order	Yes	MSOP10(TVSP10)
NJU71091T1	1ch. Video Driver with Short to Battery Protection	2.65 to 3.45	1	1	1				1		6th order	Yes	DFN8-U1
NJU71094T1	Differential Output Video Driver with Short to Battery Protection	2.65 to 3.45	2	2	1				2		6th order	Yes	DFN8-W2
NJW1230	Video: AC or DC Coupling Output Audio: Ground Referenced Output	2.8 to 3.6	1 (Video) 2 (Audio)	1			1			6	6th order 1st order	Yes	SSOP16
NJW1350	Low Operating Voltage Output Capacitor-less (0V DC Output)	2.5 to 3.45	1	1			1			12	6th order	Yes	DFN10-K1 MSOP8(TVSP8)
NJW1351	Low Operating Voltage Output Capacitor-less (0V DC Output)	2.5 to 3.45	1	1			1			6	6th order	Yes	DFN10-K1 MSOP8(TVSP8) DFN8-U1
NJW1352	Low Operating Voltage Output Capacitor-less (0V DC Output)	2.5 to 3.45	1	1			1			9	6th order	Yes	DFN10-K1 MSOP8(TVSP8)
NJW1353	Low Operating Voltage Output Capacitor-less (0V DC Output)	2.5 to 3.45	1	1			1			16	6th order	Yes	DFN10-K1 MSOP8(TVSP8)

Video Switches

V: Composite Video Signal S: S-Video Signal(Y/C) C: Component Signal(Y/Pb/Pr)/RGB Signal

Part No.	Function	Operating Voltage [V] min./max.	Input			Output			Clamp [dB]	Bias	6dB AMP	75ohm Driver	Package Outline
			V	S	C	V	S	C					
NJM2526	Isolation Amplifier for CVBS	4.5 to 9	4			1			Yes				SSOP16
NJM2533		4.75 to 13	2			1				Yes			DIP8 DMP8 SIP8 SSOP8
NJM2534		4.5 to 13	3			1				Yes			DIP8 DMP8 SIP8 SSOP8
NJM2535		4.5 to 13	3			1			Yes				DIP8 DMP8 SIP8 SSOP8
NJM2584A	High Definition	4.5 to 9			2			1	Yes	Yes			DMP16
NJM2586A	High Definition	±4.5 to ±5.5			3			1		Yes	Yes	Yes	SDIP22 SSOP20-C3
NJM2595	Dual Power Supply	±4 to ±6.5	5			3				Yes	Yes	Yes	DMP16
NJM41010		4.5 to 9.5	2			1			Yes		Yes	Yes	SOT-23-6-1

Note) MSOP8(TVSP8) : MEET JEDEC MO-187-DA / MSOP10(TVSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Video Switches

Part No.	Function	Operating Voltage [V] min./max.	Input			Output			Clamp [dB]	Bias	6dB AMIP	75ohm Driver	Package Outline
			V	S	C	V	S	C					
NJM41050	LPF Mute 47uF AC-Coupling Capacitor	4.5 to 9.5	3			1			Yes		Yes	Yes	SSOP14
NJW1327	Wide band I ² C BUS control function	3 to 3.45 -3 to -5.5	9		6	5		4		Yes	Yes	Yes	QFP100-U1
NJW1328	Wide band Differential input Signal Detector I ² C BUS control function	4.5 to 5.5	7		3	3		2	Yes	Yes	Yes	Yes	LQFP52-H2
NJW1329	Wide band Signal Detector I ² C BUS control function	3 to 3.45 -3 to -5.5	7		3	2		1		Yes	Yes	Yes	LQFP52-H3
NJW1340	I ² C BUS control function 6th order LPF	4.5 to 5.5	5	3(x2)		1	1		Yes	Yes			SSOP32
NJW1341	47uF AC-Coupling Capacitor Isolation Amplifier I ² C BUS control function	4.5 to 9.5	8			2			Yes		Yes	Yes	SSOP20-C3
NJW1342	Low Operating Voltage Video Switch with Isolation Amplifier 47uF AC-Coupling I ² C BUS control function	3 to 5.5	4			2			Yes	Yes	Yes	Yes	SSOP32

Signal Processor for TFT Display

Part No.	Key Features	Operating Voltage [V] min./max.	Package Outline	Notes
NJM2529	NTSC/PAL Matching, Y/C Separating Circuit	4.75 to 5.25 11 to 13 -5.25 to -4.75	QFP64-H1	

Others ICs

Part No.	Key Features	Operating Voltage [V] min./max.	Package Outline	Notes
NJD2201	For ECM, THD (0.1% typ.)	1 to 10	DFN4-E1	
NJM2761	Audio Limiter (Speaker Protection), Limit Level: 0.2 to 1Vrms Mixed L+Rch signal detection	2.7 to 13	SSOP14 MSOP10(TVSP10)	
NJM2762	Speaker Protection Limit Level: 0.2 to 1Vrms Independent L/Rch signal detection	2.7 to 13	SSOP14 MSOP10(TVSP10)	
NJU3610	1bit Delta-Sigma stereo ADC Single power supply: 3.0 to 3.6V (Built-in regulator using together) Two power supply: Analog(3.0 to 3.6V)/Digital(1.65 to 2.0V)	3 to 3.6	LQFP48-R3	
NJU7181	Power Saving for battery operated devices Muting Application Memory saving for recording devices Half- duplex transmission application	0.9 to 5.5	DFN8-U1 MSOP8(TVSP8)	
NJW1124	Voice Switched Speakerphone circuit Amplifiers(Microphone , Receive ,Line) level detector All external capacitors are ceramic capacitors.	2.9 to 4.5	SSOP32	
NJW1128	Voice Switched Speakerphone circuit Amplifiers(Microphone , Receive ,Line) level detector All external capacitors are ceramic capacitors.	3.9 to 5.5	LQFP48-R3	

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Communication ICs & RF Devices

FM IF Demodulator ICs

Part No.	Function	Key Features	Operating Voltage [V] min./max.	Operating Current [mA] typ.	IF	Mixer	RSSI	Filter Amp	FSK Comp	Quick Charge	Other	Package Outline
NJM14570	Wide Band FM IF Demodulator	Up to 15MHz IF	1.8 to 9	2.9	10.7kHz		Yes					MSOP8(TVSP8)
NJM2292	Narrow Band FM IF		1.8 to 7	2	455kHz	Up to 100MHz	Yes	Yes			Squelch	SSOP20
NJM2294	FM IF for Pager	Suitable for battery use	1.1 to 4	0.6	455kHz		Yes	Yes	Yes		Battery Save Battery Alarm	SSOP16
NJM2295A	FM IF for Remote Keyless Entry System	Suitable to 10.7MHz application	2.7 to 7	5	10.7MHz	Up to 450MHz	Yes	Yes	Yes	Yes	Battery Save	SSOP20
NJM2537	FM IF for Pagers	Suitable for battery use	1.1 to 4	1.2	455kHz	Up to 50MHz	Yes	Yes	Yes		Battery Save Battery Alarm	SSOP20
NJM2549	Wide Band FM IF Demodulator	Up to 15MHz IF	2.7 to 9	3	10.7MHz		Yes					MSOP10(TVSP10)
NJM2550	10.7MHz Input FM IF Demodulator	IF 5MHz to 50MHz Adjust RSSI's Thermal Characteristics	2 to 9	4.4	10.7MHz		Yes	Yes	Yes	Yes		SSOP16
NJM2552	100MHz Input Mixer and 450kHz FM/AM IF Demodulator	Up to 2MHz IF Built-in AM demodulator	2.2 to 9	2.5(FM) 5(AM)	450kHz	Up to 100MHz	Yes	Yes			AM AGC AM SW	SSOP20
NJM2590	455kHz Input FM IF Demodulator	Low current/voltage	1.6 to 5.5	0.55	455kHz		Yes	Yes	Yes	Yes	RSSI Comparator	SSOP14
NJM2591	100MHz Input 450kHz FM IF Demodulator for Voice	Low current	1.8 to 9	2.5	450kHz	Up to 100MHz	Yes	Yes			Noise Detector Noise Comparator	SSOP16
NJM2592	470MHz Input Mixer and 455kHz FM IF Demodulator	50 ohm Mixer Input Imp.	1.8 to 9	2.2	455kHz	Up to 470MHz	Yes	Yes	Yes	Yes	RSSI Comparator	SSOP20
NJM2593	50MHz Input Mixer and 450kHz FM IF Demodulator	Low current/voltage	1.8 to 9	1.2	450kHz	Up to 50MHz	Yes	Yes	Yes	Yes	RSSI Comparator	SSOP20
NJM2597	455kHz Input FM IF Demodulator	Low current/voltage	1.6 to 5.5	0.55	455kHz		Yes	Yes	Yes	Yes	RSSI Comparator	SSOP14
NJW2311	Phase Shifter-less Wide Band FM IF Demodulator IC for Voice	Phase Shifter-less SNR:80dB,THD:0.015%	4.5 to 5.5	23	1.5M to 15M						Low Noise Amp. for Voice	SSOP14

Amplifier/ PLL ICs

Part No.	Function	Key Features	Operating Voltage [V] min./max.	Operating Current [mA] typ.	Operating Frequency (Reference) [MHz]	Amp	Mixer	PLL	Package Outline
NJM2275	VHF/UHF Band RF Amplifier	Cascode Amplifier Built-in Bias Circuit Peak for External CL	1.8 to 6	0.8	Up to 800	Yes			SOT-23-6-1
NJM2278	20mW Power Amplifier	Down Converter Built-in Bias Circuit Peak for External CL	2 to 5.5	20	300 to 500	Yes			SOT-23-6-1
NJM2287	100MHz Input Mixer and 450kHz IF Gain Control IC	Dynamic range (Up to 80dB) Built-in RSSI	2.7 to 5.5	4.7	RF: Up to 100 IF: 0.45	Yes	Yes		SSOP14
NJW1504	PLL Synthesizer with I ² C Bus for TV Tuner	Prescaler up to 1GHz 36V max. Tuning Voltage Output	4.5 to 5.5	15	80 to 1000			Yes	SSOP16

Modulation /Demodulation /Mixer ICs

Part No.	Function	Key Features	Operating Voltage [V] min./max.	Operating Current [mA] typ.	Operating Frequency (Reference) [MHz]	Mixer	Modulation /Demodulation	Package Outline
NJM2288	300/400MHz Band Down Mixer with Amplifier	Low Current Gain Flatness for Temp.	2 to 5.5	2.8	300MHz to 500MHz	Yes		SOT-23-6-1
NJM2299	Wave Shaping Circuit for FSK	Low data error rate Short wake-up time	1.8 to 5.5	0.6	Up to 2kHz (Up to 4kbps)		Yes	MSOP10(TVSP10)

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Modulation /Demodulation /Mixer ICs

Part No.	Function	Key Features	Operating Voltage [V] min./max.	Operating Current [mA] typ.	Operating Frequency (Reference) [MHz]	Mixer	Modulation /Demodulation	Package Outline
NJM2519A	RF Modulator for VHF Band		4.5 to 5.5	15.3			Modulation	DMP8
NJM2536A	RF Modulator for VHF Band	Carrier-off switch External ANT switch drive output	4.5 to 5.5	16			Modulation	DMP14 SSOP14
NJM2542	VIF/SIF Demodulator	AFT: Adjustment Free FM-PLL Demodulator: Adjustment Free	4.75 to 5.25	51			Demodulation	SSOP20
NJM2594	Double Balanced Modulation/ Demodulation	Up to 200MHz Mod/ Demod/ Doublers	4.5 to 9	11	Up to 200MHz	Yes	Yes	DMP8 SSOP8
NJU7512	1200 bps MSK Modem for Data Communication	High Receiving Sensitivity Noise Susceptibility	1.8 to 5.5	1.9	1200Hz/1800Hz (1200bps)		Modem	SSOP20
NJW2307	FM modulation/ Demodulation with PLL	Adjustment needlessness Built-in VCO, PLL, AFC	3.8 to 5.5	Mod: 9 Dem: 9.5	2.3MHz 2.8MHz		Modem	SSOP20-C3

Power Line Communication IC

Part No.	Key Features	Operating Voltage [V]	Operating Current1 (Transmit) [mA]	Operating Current2 (Receive) [mA]	Transmit Amplifier					Receive Amplifier				Package Outline
					Z _o [ohm]	V _o [mV]	I _b [uA]	SR [V/us]	GBW [MHz]	Noise Figure [dB]	SR [V/us]	GBW [MHz]	THD [%]	
NJM45001	Higher transmit performance (High output current 3A typ.) Flexible receive gain control (-18dB/-6dB/0dB/+12dB)	8 to 22	50	6	0.05	10	1	40	50	26	15	8.5	0.003	HSSOP24

Power Amplifiers (3G/LTE)

Part No.	Applications	Bands	Gain [dB]	Pout [dBm]	ACLR_UTRA [dBc]	PAE [%]	Supply Voltage [V]	Package Size [mm]	Package Outline
NJG1329LE4	LTE High Band PAM	Band 7,41,38,AXGP	30	28	-40	31.5	3.4	2x2.5x0.8	EMCM10-E4
NJG1330LEC	LTE Ultra High Band PAM	Band 42,43,48	30	28	-40	32	3.4	2x2.5x0.7	EMCM10-EC
NJG1331LGE (Under Development)	LTE Middle Band PAM	Band 1,2,25,3,4,66,34,39	30	28	-40	36	3.4	3x3x0.7	EMCM10-GE

Low Noise Amplifiers (Front-End Modules)

Part No.	Applications	Gain [dB] typ.	NF [dB] typ.	P-1dB [dBm] typ.	IIP3 [dBm] typ.	Frequency Range [MHz]	Operating Voltage [V]	Operating Current [mA] typ.	Package Size [mm] typ.	Package Outline	Notes
NJG1156PCD	GPS	18.5/17.5	1.55/1.60	-15/-17	-4/-6	1575	2.8/1.8	3.3/2.6	2.5x2.5x0.63	HFFP10-CD	
NJG1157PCD	GPS/ GLONASS	18.5/17.5	1.60/1.65 1.70/1.75	-15/-17	-3/-6	1575 1597 to 1606	2.8/1.8	3.3/2.6	2.5x2.5x0.63	HFFP10-CD	
NJG1159PHH	GNSS (GPS/ GLONASS/ BeiDou/ Galileo)	Gain(2.8V)/(1.8V) 16.0/ 15.5 16.5/ 16.0 16.0/ 15.5	1.50/1.55 1.65/1.70 1.70/1.75	-10/-13	-2/-5	1575 1597 to 1606 1559 to 1591	2.8/1.8	3.7/3.0	1.5x1.1x0.5 (max.)	HFFP10-HH	
NJG1168PCD	GPS	18/17	1.65/1.70	-12/-15	+1/-4	1575	2.8/1.8	2.4/1.8	2.5x2.5x0.63	HFFP10-CD	

Low Noise Amplifiers (GNSS :Global Navigation Satellite System)

Part No.	Applications	Gain [dB] typ.	NF [dB] typ.	P-1dB [dBm] typ.	IIP3 [dBm] typ.	Frequency Range [MHz]	Operating Voltage [V]	Operating Current [mA] typ.	Package Size [mm] typ.	Package Outline	Notes
NJG1107HB3	GNSS	17	1.1		-4	1575	2.7	2.5	1.5x1.5x0.75	USB8-B3	
NJG1107HB6	GNSS	17	1.1		-4	1575	2.7	2.5	1.5x1.5x0.55	USB8-B6	
NJG1107KB2	GNSS	17 15 14	1.2 1.2 1.3		-4 -2 -1.5	1500 1900 2400	2.7	3 3 3	2.1x2.0x0.75	FLP6-B2	
NJG1108HA8	GNSS/ WLAN/ WIMAX	19	1	-15	0	1575	2.7	2	1.0x1.2x0.38	USB6-A8	Stand-by function
NJG1117HA8	GNSS	19.5	0.7	-16.5	-2	1575	2.7	3	1.0x1.2x0.38	USB6-A8	
NJG1130KA1	GNSS	29	0.65	+11(out)	+14(OIP3)	1575	2.85	5	1.6x1.6x0.6	FLP6-A1	
NJG1143UA2	GNSS	20/19	0.7/0.75	-16.5/-19.5	-2/-6	1575	2.85/1.8	4/3	1.0x1.0x0.37	EPFFP6-A2	Stand-by function
NJG1144KA1	GNSS	21/18	0.65/0.85	-16.5/-18.5	-2/-6	1575	2.85/1.8	3.5/1.8	1.6x1.6x0.55	FLP6-A1	
NJG1150UA2	GNSS	16/16	0.6/0.6	-7/-9	+1/-1	1575	2.8/1.8	4.9/4.2	1.0x1.0x0.37	EPFFP6-A2	Stand-by function
NJG1155UX2	GNSS	19/18.5	0.75/0.75	-12.5/-16	-1.5/-5	1575	2.8/1.8	3.5/3.1	1.1x0.7x0.37	EPFFP6-X2	Stand-by function

Low Noise Amplifiers (Digital Mobile TV)

H: High gain mode L: Low gain mode

Part No.	Applications	Gain [dB] typ.		NF [dB] typ.	P-1dB [dBm] typ.		IIP3 [dBm] typ.		Frequency Range [MHz]	Operating Voltage [V]	Operating Current [mA] typ.		Package Size [mm] typ.	Package Outline
		H	L		H	L	H	L			H	L		
NJG1129MD7	Digital Mobile TV	15	-4	1.4	-6	+12	+1	+20	470-770	2.8	5	16uA	1.6x1.6x0.397	EQFN14-D7
NJG1131HA8	Digital Mobile TV	10		1.4	-5		+5		470-770	2.7	3.4		1.0x1.2x0.38	USB6-A8
NJG1134HA8	Digital Mobile TV	10	-0.6	1.2	-5		+5	+23	470-770	2.8	4	10uA	1.0x1.2x0.38	USB6-A8
NJG1139UA2	Digital Mobile TV	14	-2	1.2	-12	+15	-4	+30	470-770	1.8	3.5	11uA	1.0x1.0x0.37	EPFFP6-A2
NJG1142KA1	Digital Mobile TV	14	-1	1.5	0	+17	+2	+22	170-900	2.8/1.8	6	11uA	1.6x1.6x0.55	FLP6-A1

Low Noise Amplifiers (TV tuner/STB)

H: High gain mode L: Low gain mode

Part No.	Applications	Gain [dB] typ.		NF [dB] typ.	P-1dB [dBm] typ.		IIP3 [dBm] typ.		Frequency Range [MHz]	Operating Voltage [V]	Operating Current [mA] typ.		Package Size [mm] typ.	Package Outline
		H	L		H	L	H	L			H	L		
NJG1140KA1	TV tuner/ STB	9		2.5	+7		+9		50-2150	3.3	10		1.6x1.6x0.55	FLP6-A1
NJG1145UA2	TV tuner/ STB	15	-1	1.5	0	+15	+10	+30	90-2150	2.8	20	11uA	1.0x1.0x0.37	EPFFP6-A2
NJG1146KG1	TV tuner/ STB	12	-1	2.2	+6	+16	+22	+33	40-900	5	60	30uA	1.6x1.6x0.397	DFN6-G1
NJG1151MD7	TV tuner/ STB	6		2.5	+7		+20		40-1000	5	100		1.6x1.6x0.397	EQFN14-D7
NJG1152KA1	TV tuner/ STB	18	-1	0.9	-5	+15	+7	+30	40-900	3.3	20	17uA	1.6x1.6x0.55	FLP6-A1
NJG1162K64	TV tuner/STB	13	-1	2.2	+4	+16	+20	+33	40-1000	3.3	50	20uA	1.5x1.5x0.375	DFN8-64

Low Noise Amplifiers (3G/LTE)

H: High gain mode L: Low gain mode

Part No.	Applications	Gain [dB] typ.		NF [dB] typ.		P-1dB [dBm] typ.		IIP3 [dBm] typ.		Frequency Range [MHz]	Operating Voltage [V]	Operating Current [mA] typ.		Package Size [mm] typ.	Package Outline
		H	L	H	L	H	L	H	L			H	L		
NJG1126HB6	3G/LTE/WLAN/WiMAX	16.5	-7	1.4	7	-12	+11	0	+16	2140	2.7	2.2	1uA	1.5x1.5x0.55	USB8-B6
NJG1127HB6	3G/LTE	15	-2.5	1.4	2.5	+9	+8	+11	+19	800	2.8	10	1uA	1.5x1.5x0.55	USB8-B6
NJG1128HB6	3G/LTE	15	-3	1.4	3	+9	+8	+11	+21	410	2.8	10	1uA	1.5x1.5x0.55	USB8-B6
NJG1133MD7	3G/LTE	16	-3.5	1.35	3.5	-11.5	+14	+0.5	+12	2140	2.8	2.3	48uA	1.6x1.6x0.397	EQFN14-D7
		16	-4	1.35	4	-8	+16	0	+15	1860					
		16	-3	1.4	3	-9.5	+17	-2	+12	885					
		16	-3	1.55	3	-9	+16	0	+15	1495					
NJG1135MD7	3G/LTE	16	-2.5	1.4	2.5	-4	+10.5	+10	+19	880	2.8	10	30uA	1.6x1.6x0.397	EQFN14-D7
		16	-3.5	1.4	4	-6	+8.5	+8	+17	1960					
NJG1138HA8	3G/LTE	16	-3	1.4	3	-8.5	+16	0	+14	942.5	2.8	2.3	10uA	1.0x1.2x0.38	USB6-A8
NJG1169UX2	3G/LTE	12.5	-2.5	0.8		+10		0		880	2.8	4.8	15uA	1.1x0.7x0.37	EPFFP6-X2
NJG1170UX2	3G/LTE	14.5	-3	0.8		-8	+10	+3.5	+18	2500	2.8	4.8	15uA	1.1x0.7x0.37	EPFFP6-X2
		15		0.7	-8.5	+2		+17	2000						
NJG1173UX2	3G/LTE	13.5	-3.5	1		-10	+10	+5	+18	3500	2.8	5	15uA	1.1x0.7x0.37	EPFFP6-X2

Low Noise Amplifiers (WLAN)

H: High gain mode L: Low gain mode

Part No.	Applications	Gain [dB] typ.		NF [dB] typ.	P-1dB [dBm] typ.		IIP3 [dBm] typ.		Frequency Range [MHz]	Operating Voltage [V]	Operating Current [mA] typ.		Package Size [mm] typ.	Package Outline	Notes
		H	L		H	L	H	L			H	L			
NJG1148MD7	WLAN	12.5	-5	1.5	-5	+10	+5	+10	4900-5950	3.3	7	5uA	1.6x1.6x0.397	EQFN14-D7	
NJG1730MD7	WLAN	15	-6	1.6	-4	+9	+7	+13	2400-2500	3.6	10	4uA	1.6x1.6x0.397	EQFN14-D7	SP3T Switch + LNA
NJG1739K51	WLAN	12	-8.5	2.5	0	+15	+9	+14	4900-5900	3.6	8	4uA	2.0x2.0x0.375	QFN12-51	SPDT Switch + LNA

RF Switches

Part No.	Function	P-0.1dB [dB] typ.	Power Levels	Insertion Loss [dB] typ.	Isolation [dB] typ.	Frequency Range [MHz]	Package Size [mm] typ.	Package Outline
NJU1206MER	SP6T Switch	34	High Power	0.30@0.9GHz 0.40@1.9GHz 0.50@2.7GHz	40@0.9GHz 30@1.9GHz 26@2.7GHz	0.2 to 3	2.0x2.0x0.397	EQFN14-ER
NJG1512HD3	SPDT Switch	20	Low Power	0.6@1.0GHz	44@1.0GHz	0.001 to 3	2.0x1.8x0.85	USB6-D3
NJG1608KB2	SPDT Switch	27	Middle Power	0.3@2.0GHz 0.5@2.5GHz 0.6@5.85GHz	29@2.0GHz 30@2.5GHz 18@2.5GHz	0.1 to 6	2.1x2.0x0.75	FLP6-B2
NJG1615HA8	SPDT Switch	27	Middle Power	0.55@5.85GHz	25@2.5GHz	0.1 to 6	1.0x1.2x0.38	USB6-A8
NJG1617K11	DPDT	31	High Power	0.75@6GHz	25@6GHz	0.1 to 6	3.0x3.0x0.75	QFN12-11
NJG1635AHB6	SPDT Switch	34	High Power	0.30@0.9GHz 0.35@1.9GHz 0.40@2.7GHz	35@0.9/1.9GHz 33@2.7GHz	0.05 to 3	1.5x1.5x0.55	USB8-B6
NJG1647HD3	SPDT Switch	36	High Power	0.25@0.9GHz 0.3@1.9GHz	25@0.9GHz 20@1.9GHz	0.2 to 3	2.0x1.8x0.8	USB6-D3

RF Switches

Part No.	Function	P-0.1dB [dB] typ.	Power Levels	Insertion Loss [dB] typ.	Isolation [dB] typ.	Frequency Range [MHz]	Package Size [mm] typ.	Package Outline
NJG1648HB6	DPDT	23	Low Power	0.20@0.5GHz 0.25@1GHz 0.40@2GHz	26@0.5GHz 21@1GHz 15@2GHz	0.1 to 3	1.5x1.5x0.55	USB8-B6
NJG1649HB6	SPDT Switch	29	Middle Power	0.35@1.0GHz 0.40@2.0GHz 0.45@2.5GHz	27@1.0GHz 22@2.0GHz 20@2.5GHz	0.05 to 3	1.5x1.5x0.55	USB8-B6
NJG1650HB6	SP3T Switch	28	Middle Power	0.38@1.0GHz 0.42@2.0GHz 0.45@2.5GHz	29@1.0GHz 23@2.0GHz 21@2.5GHz	0.05 to 3	1.5x1.5x0.55	USB8-B6
NJG1655ME7	DP6T Switch (X-SP3T)	23	Low Power	0.4@1.0GHz 0.45@2.0GHz	18@2.0GHz 21@2.0GHz	0.05 to 3	2.0x2.0x0.397	EQFN18-E7
NJG1657MD7	DPDT	35	High Power	0.3@0.9GHz 0.4@1.9GHz	32@0.9GHz 26@1.9GHz	0.05 to 3	1.6x1.6x0.397	EQFN14-D7
NJG1660HA8	SPDT Switch	32	High Power	0.35@2.5GHz 0.45@3.5GHz 0.50@6.0GHz	33@2.5GHz 30@3.5GHz 21@6.0GHz	0.05 to 8	1.0x1.2x0.38	USB6-A8
NJG1665MD7	SP5T Switch	29	Middle Power	0.4@1.0GHz 0.5@2.0GHz 0.6@2.5GHz	29@1.0GHz 23@2.0GHz 21@2.5GHz	0.05 to 3	1.6x1.6x0.397	EQFN14-D7
NJG1666MD7	SPDT Switch	25	Middle Power	0.40@0.25GHz 0.45@1.0GHz 0.50@2.2GHz	70@0.25GHz 60@1.0GHz 60@2.2GHz	0.05 to 3	1.6x1.6x0.397	EQFN14-D7
NJG1667MD7	SP5T Switch	29	Middle Power	0.4@1.0GHz 0.5@2.0GHz 0.6@2.5GHz	29@1.0GHz 23@2.0GHz 21@2.5GHz	0.05 to 3	1.6x1.6x0.397	EQFN14-D7
NJG1669MD7	SPDT Switch	36	High Power	0.35@2.5GHz 0.40@3.5GHz 0.45@6.0GHz	28@2.5GHz 29@3.5GHz 25@6.0GHz	0.05 to 6	1.6x1.6x0.397	EQFN14-D7
NJG1670LG3	SP10T Switch		High Power	0.40@UMTS Band 5 0.45@UMTS Band 8 0.60@UMTS Band 2 0.70@UMTS Band 1 0.85@GSM850/900 Tx 1.00@GSM1800/1900 Tx		0.2 to 3	3.2x2.5x0.85	LCSP20-G3
NJG1672LK4	SP9T Switch		High Power	1.0@GSM850/900 0.9@GSM1800/1900 TX 1.0@LCR TX		0.1 to 3	3.8x3.8x0.9	LCSP24-K4
NJG1673LG3	SP9T Switch		High Power	0.40@UMTS Bands5 0.60@UMTS Band2 0.70@UMTS Band1 0.85@GSM850/900 Tx 1.00@GSM1800/1900 Tx		0.2 to 3	3.2x2.5x0.85	LCSP20-G3
NJG1681MD7	SPDT Switch	36	High Power	0.18@0.9GHz 0.20@1.9GHz 0.23@2.7GHz 0.45@6.0GHz	45@0.9GHz 35@1.9GHz 30@2.7GHz 20@6.0GHz	0.2 to 6	1.6x1.6x0.397	EQFN14-D7
NJG1682MD7	SP3T Switch	36	High Power	0.22@0.9GHz 0.25@1.9GHz 0.30@2.7GHz	35@0.9GHz 30@1.9GHz 27@2.7GHz	0.2 to 3	1.6x1.6x0.397	EQFN14-D7
NJG1683ME7	X-SP3T Switch (DP6T) High Isolation	23	Low Power	0.35@1.0GHz 0.45@2.0GHz 0.60@2.7GHz	55@1.0GHz* 47@2.0GHz* 45@2.7GHz*	0.05 to 3	2.0x2.0x0.397	EQFN18-E7
NJG1684ME2	SP4T Switch	36	High Power	0.25@0.9GHz 0.30@1.9GHz 0.35@2.7GHz	37@0.9GHz 29@1.9GHz 25@2.7GHz	0.2 to 3	1.8x1.8x0.397	EQFN12-E2

*With balanced mode operation

RF Switches

Part No.	Function	P-0.1dB [dB] typ.	Power Levels	Insertion Loss [dB] typ.	Isolation [dB] typ.	Frequency Range [MHz]	Package Size [mm] typ.	Package Outline
NJG1686MHH	SP10T Switch		High Power	0.65@452 to 960MHz 0.30@452 to 960MHz 0.75@1710 to 2170MHz 0.45@1710 to 2170MHz 1.10@2300 to 2690MHz 0.45@2300 to 2690MHz 1.05@GSM850/900 1.20@GSM1800/1900	38@GSM850/900 34@GSM1800/1900 25@452 to 2690MHz 36@1805 to 1990MHz 33@452 to 2690MHz	0.2 to 3	2.6x3.4x0.7	EQFN26-HH
NJG1690MD7	DP4T Switch (X-SPDT) High Isolation	24	Low Power	0.3@1GHz 0.4@2GHz 0.45@2.7GHz	37@2.7GHz* 29@1GHz 24@2GHz 21@2.7GHz	0.05 to 3	1.6x1.6x0.397	EQFN14-D7
NJG1695ME7	X-SP4T Switch (DP8T) High Isolation	23	Low Power	0.45@1.0GHz 0.55@2.0GHz 0.80@2.7GHz	43@1.0GHz* 38@2.0GHz* 35@2.7GHz*	0.05 to 3	2.0x2.0x0.397	EQFN18-E7
NJG1697EM1	SPDT Switch High Isolation	21	Low Power	0.45@1GHz 0.50@2GHz 0.55@2.7GHz	50@1GHz 48@2GHz 43@2.7GHz	0.5 to 3	1.0x1.0x0.38	DFN6-M1
NJG1698K84	SP3T Switch High Isolation	22	Low Power	0.50@1.0GHz 0.55@2.0GHz 0.60@2.7GHz	51@1.0GHz 50@2.0GHz 43@2.7GHz	0.5 to 3	1.55x1.15x0.37	QFN10-84
NJG1699MD7	SP4T Switch High Isolation	21	Low Power	0.55@1GHz 0.55@2GHz 0.60@2.7GHz	50@1GHz 48@2GHz 43@2.7GHz	0.5 to 3	1.6x1.6x0.397	EQFN14-D7
NJG1800NB2	DP4T Switch (X-SPDT)	21	Low Power	0.38@2GHz 0.36@2.7GHz	39@2GHz 37@2.7GHz	0.5 to 3	1.55x1.15x0.55	EPCSP10-B2
NJG1801K75	SPDT Switch	31@2.5GHz 31@5.9GHz	Middle Power	0.35@2.4 to 2.5GHz 0.45@4.9 to 5.9GHz	28@2.4 to 2.5GHz 30@4.9 to 5.9GHz	0.05 to 6	1.0x1.0x0.375	DFN6-75
NJG1802K51	SPDT Switch	36	High Power	0.18@0.9GHz 0.20@1.9GHz 0.23@2.7GHz	50@0.9GHz 38@1.9GHz 33@2.7GHz	0.2 to 6	2.0x2.0x0.375	QFN12-51
NJG1804K64	SP3T Switch	29@2.5GHz 29@5.9GHz	Middle Power	0.50@2.4 to 2.5GHz 0.60@4.9 to 5.9GHz	30@2.4 to 2.5GHz 26@4.9 to 5.9GHz	0.05 to 6	1.5x1.5x0.375	DFN8-64
NJG1806K75	SPDT Switch	31@ 0.7 to 5.9GHz	Middle Power	0.35@0.7GHz 0.35@1.9GHz 0.35@2.4 to 2.5GHz 0.4@4.9 to 5.9GHz	30@0.7GHz 25@1.9GHz 25@2.4 to 2.5GHz 25@4.9 to 5.9GHz	0.05 to 6	1.0x1.0x0.375	DFN6-75
NJG1808K94	SP3T Switch	24	Low Power	0.35@1.0GHz 0.4@2.0GHz 0.4@2.7GHz	29@1.0GHz 26@2.0GHz 24@2.7GHz	0.7 to 3	1.1x1.1x0.425	QFN9-94
NJG1809ME7	SP4T Switch	32	High Power	0.4@2.7GHz 0.4@3.5GHz 0.5@5.85GHz	27@2.7GHz 25@3.5GHz 30@5.85GHz	0.2 to 6	2.0x2.0x0.397	EQFN18-E7
NJG1812ME4	DPDT	36	High Power	0.25@900MHz 0.35@1900MHz 0.45@2700MHz	25@900MHz 20@1900MHz 17@2700MHz	0.2 to 3	2.0x2.0x0.397	EQFN12-E4
NJG1814MD7	SPDT Switch	33	High Power	0.35@0.7GHz 0.38@2.0GHz 0.40@2.7GHz 0.45@5.85GHz	42@0.7GHz 35@2.0GHz 34@2.7GHz 33@5.85GHz	0.2 to 6	1.6x1.6x0.397	EQFN14-D7
NJG1815K75	SPDT Switch	31@ 2.4 to 6GHz	Middle Power	0.45@2.4 to 2.5GHz 0.4@4.9 to 6GHz	25@2.4 to 2.5GHz 25@4.9 to 6GHz	1 to 6	1.0x1.0x0.375	DFN6-75

*With balanced mode operation

Motor ICs

DC Brush Motor/ Actuator Drivers

Part No.	Driver Formation		Output Current [A] max.	Motor Voltage		Logic Voltage [V]	Package Outline
	Output Form	Number of channel		Absolute Maximum Rating [V]	Operating Voltage [V] min./max.		
NJU7325	BTL	2	0.6	7	2.4 to 5.5		MSOP8(VSP8) MSOP8(TVSP8) DFN8-V1
NJU7381A	Half Bridge	4	0.4	7	1.8 to 5.5		SSOP16 EQFN16-JE
NJU7385	Half Bridge	4	0.7	9	3 to 8	2.5 to 5.5	SSOP20-C3
NJW4801	Half Bridge	1	0.45	40	8 to 35		MSOP8(VSP8)
NJW4813	Half Bridge	2	0.2	40	8 to 35	2.7 to 5.5	PCSP20-E3
NJW4814	Half Bridge	4	0.02	40	8 to 35	2.7 to 5.5	EQFN24-LE
NJW4820	Sink	1	0.5	43	to 40	2.64 to 5.5	SOT-23-5
NJW4822	Sink	1	0.2	43	to 40	2.64 to 5.5	DFN6-H1
NJW4830	Source	1	0.5	45	4.6 to 40	2.64 to 5.5	SOT-89-5-2
NJW4832	Source	1	0.2	45	4.6 to 40	2.64 to 5.5	DFN6-H1

Bipolar Stepper Motor Drivers

Part No.	Output Current [V] max.	Motor Voltage		Logic Voltage [V]	Number of Motors [V]	Key Features				Package Outline
		Absolute Maximum Rating [V]	Operating Voltage [V] min./max.			Input Mode	Excitation Mode	Constant Current		
								VR Input	Current Select	
NJM13775	0.5	45	10 to 40	4.75 to 5.25	1	Phase +EN	2/1-2	Yes		LQFP48-R3
NJU7381A	0.4	7	1.8 to 5.5		1	2IN	2/1-2			SSOP16 EQFN16-JE
NJU7382A	0.4	7	1.8 to 5.5		1	Phase +EN	2/1-2			EQFN16-JE
NJU7384	0.7	9	4 to 8	3 to 5.5	1	CLK	2/1-2			SSOP32
NJU7385	0.7	9	3 to 8	2.5 to 5.5	1	Phase +EN 2IN	2/1-2			SSOP20-C3
NJW4372	0.8	40	9 to 36	2.7 to 5.5	1	CLK	2/1-2	Yes	2bit	SSOP32
NJW4375	0.8(Bipolar) 1.5(Unipolar)	40	10 to 36	2.7 to 5.5	1	SPI	2/1-2	Yes	Data	SDIP22 SSOP32
NJW4382	1.5	40	8 to 36		1	Phase +Ix	2/1-2/W1-2	Yes	2bit	HTSSOP24-P1 SDIP22
NJW4382A	1.5	40	8 to 36		1	2IN	2/1-2	Yes		SDIP22

Unipolar Stepper Motor Drivers

Part No.	Output Current [V] max.	Motor Voltage		Logic Voltage [V]	Number of Motors [V]	Key Features				Package Outline
		Absolute Maximum Rating [V]	Operating Voltage [V] min./max.			Input Mode	Excitation Mode	Constant Current		
								VR Input	Current Select	
NJW4350	1.5	55	5 to 50	4.5 to 5.5	1	CLK	2/1-2			DIP16 SOP16 JEDEC 300mil
NJW4351	1.5	55	to 50	2.7 to 5.5	1	CLK	2/1-2			SSOP20-C3
NJW4375	0.8(Bipolar) 1.5(Unipolar)	40	10 to 36	2.7 to 5.5	1	SPI	2/1-2	Yes	Data	SDIP22 SSOP32

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Stepper Motor Controllers

Part No.	Logic Voltage [V]	Number of Motors [V]	Key Features			Package Outline
			Input Mode	Output Mode	Excitation Mode for Motor Driver	
NJU39610	4.75 to 5.25	1	8bit	D/A Output	2 to 32W1-2	DIP22-D2 PLCC28-M2
NJU39612	4.75 to 5.25	1	8bit	D/A Output	2 to 32W1-2	SOP20 JEDEC 300mil
NJU7380	4.75 to 5.25	1	CLK	Phase +EN	2/1-2	DMP14

Three-Phase BLDC Motor Pre-Drivers

Part No.	Phase Input	Supply Voltage		Output Drive Mode	Lead Angle	Operating Temperature Range [°C]	Package Outline
		Absolute Maximum Rating [V]	Operating Voltage [V] min./max.				
NJM2624A	2Inx3	20	4.5 to 18	120°Square Wave		-25 to +85	DIP16 DMP16 SSOP16
NJM2625A	2Inx3	20	8 to 18	120°Square Wave		-40 to +85	DMP20
NJM2626	1Inx3	28	6 to 26	120°Square Wave		-40 to +85	SSOP16 SSOP20-C3
NJM2627	2Inx3	15	4.5 to 14	120°Square Wave		-40 to +85	DIP16 DMP16 SSOP16
NJW4303	2Inx3	40	9 to 35	120°Square Wave		-40 to +85	SSOP32
NJW4305A	2Inx3	40	7.3 to 36	120°Square Wave		-40 to +105	SSOP20-C3
NJW4308	2Inx3	40	6 to 36	120°Square Wave / Angle Adjust / Slope	Yes	-40 to +105	SSOP32

Three-Phase BLDC Motor Controllers

Part No.	Phase Input	Supply Voltage		Output Drive Mode	Lead Angle	Operating Temperature Range [°C]	Package Outline	Notes
		Absolute Maximum Rating [V]	Operating Voltage [V] min./max.					
NJU7387	2Inx3	7	4.5 to 5.5	150°Square Wave	Yes	-40 to +105	SSOP20-C3	Bootstrap Circuit
NJW4302	2Inx3	7	4.5 to 5.5	120°Square Wave		-40 to +85	QFP44-A1	

Single-Phase BLDC Motor Drivers

Part No.	Output Current [A]		Motor Voltage		Trapezoidal Output Form	Speed Control	Lock Protection	Start up Assist	Operating Temperature Range [°C]	Package Outline
	typ.	max.	Absolute Maximum Rating [V]	Operating Voltage [V] min./max.						
NJM2660A	Pre-Drive		36	4.5 to 30	Linear	Yes (D-PWM)	Yes (External Capacitor)		-40 to +85	DMP16 SSOP16
NJU7325	0.25	0.6	7	2.4 to 5.5	Linear				-40 to +85	MSOP8(VSP8) MSOP8(TVSP8) DFN8-V1
NJU7326	0.25	0.6	7	2.4 to 5.5	Linear				-40 to +85	MSOP8(VSP8) MSOP8(TVSP8)
NJU7327	0.2	0.6	18	3.5 to 15	Linear		Yes (External Capacitor)		-40 to +85	MSOP10(VSP10)
NJU7329B	0.35	0.6	7	2.4 to 5.5	Linear		Yes (External Capacitor)		-40 to +85	MSOP10(TVSP10)

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Single-Phase BLDC Motor Drivers

Part No.	Output Current [A]		Motor Voltage		Trapezoidal Output Form	Speed Control	Lock Protection	Start up Assist	Operating Temperature Range [°C]	Package Outline
			Absolute Maximum Rating [V]	Operating Voltage [V] min./max.						
	typ.	max.								
NJU7342	0.25	0.6	7	2.4 to 5.5	Linear				-40 to +85	MSOP8(VSP8) MSOP8(TVSP8)
NJU7343	0.5	1	7	2.2 to 5.5	Linear		Yes (External Capacitor)		-40 to +85	MSOP10(VSP10)
NJU7346	0.2	0.6	15	3.5 to 14	Linear				-40 to +85	MSOP10(VSP10)
NJU7347	0.2	0.6	15	3.5 to 14	Linear		Yes (External Capacitor)		-40 to +85	MSOP10(VSP10)
NJU7356	0.4	1	7	2.2 to 5.5	Linear		Yes		-40 to +85	MSOP8(TVSP8)
NJU7360	0.25	0.6	7	2.2 to 5.5	Linear				-40 to +85	MSOP8(TVSP8)
NJU7364	0.25	0.6	7	2 to 5.5	Linear				-40 to +85	MSOP8(TVSP8) DFN8-U1
NJU7365	0.35	1	7	2 to 5.5	Linear	Yes (D-PWM)	Yes		-40 to +85	MSOP8(TVSP8)
NJU7366	0.25	0.6	7	2 to 5.5	Linear	Yes (A-PWM)		Yes	-40 to +85	MSOP8(TVSP8)
NJU7367	0.35	0.7	7	2 to 5.5	Linear	Yes (D-PWM)	Yes		-40 to +85	MSOP8(TVSP8)
NJU7367A	0.35	0.7	7	2 to 5.5	Linear	Yes (D-PWM)	Yes	Yes	-40 to +85	MSOP8(TVSP8)
NJU7367B	0.35	0.7	7	2 to 5.5	Linear	Yes (D-PWM)	Yes	Yes	-40 to +105	MSOP8-Thin(TVSP8)
NJW4320	0.3	0.7	40	6 to 36	Switching	Yes (D-PWM)	Yes	Yes	-40 to +105	SSOP16
NJW4321	0.3	0.7	40	6 to 36	Switching	Yes (D-PWM/A-PWM)	Yes	Yes	-40 to +105	SSOP16

Two-Phase Unipolar BLDC Motor Pre-Drivers

Part No.	Supply Voltage		Lock Protection	Lock Alarm	FG Output	Package Outline
	Absolute Maximum Rating [V]	Operating Voltage [V] min./max.				
NJM2641	15	4 to 14	Yes (External Capacitor)	Yes		MSOP8(TVSP8) DMP8
NJM2646	30	4 to 15	Yes (External Capacitor)	Yes		MSOP8(TVSP8) DMP8 SOP8 JEDEC 150mil

FET Gate Driver for General Motor Application

Part No.	Output Current [A] max.	Supply Voltage		External FET Type	Number of channel	Operating Temperature Range [°C]	Package Outline
		Absolute Maximum Rating [V]	Operating Voltage [V] min.				
NJW4840	4	24	8 to 20	Low Side Nch.	1	-40 to +105	MSOP8(VSP8)
NJW4841	2	40	4 to 20	Low Side Nch.	1	-40 to +85	MSOP8(VSP8)
NJW4860	1	40	4 to 20	Low Side Nch.	2	-40 to +125	HSOP8-M1 DFN8-V1

Note) MSOP8(VSP8) : MEET JEDEC MO-187-DA / MSOP10(VSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

Optoelectronic Devices

Photo Diodes

Part No.	Absolute Maximum Ratings VR [V]	Peak Wavelength [nm] typ.	Dark Current [nA] max.	Cut off Frequency [MHz] typ.	Response Time (Rise/Fall) [ns] typ.	Sensitivity [A/W] typ.	MSL (Moisture Sensitivity Levels)	Package Size [mm] typ.	Package Outline	Notes
NJL6165R-1	35	780	2	300		0.65	MSL5	1.8x3.6x1.16	COBP	
NJL6193R-3	35	850	2		10/10	0.48	MSL5	1.2x1.7x0.5	COBP	
NJL6202R-1	35	780 650	2	300 350	3/3	0.47 0.37	MSL5	1.8x3.6x1.16	COBP	
NJL6401R-3	35	780 650 405	2	250 300 350	2/2	0.47 0.42 0.28	MSL5	1.2x1.7x0.8	COBP	
NJL6402R-2	35	780 650 405	2	200 220 250	2/2	0.47 0.42 0.28	MSL5	1.6x2.4x0.8	COBP	

Photo Reflectors

Part No.	Key Features	Absolute Maximum Ratings				Dark Current [uA] max.	Output Current [uA] min./max.	Response Time (Rise/Fall) [uA] typ.	MSL (Moisture Sensitivity Levels)	Package Size [mm] typ.	Package Outline
		Ptot [mW]	I _F [mA]	V _{CEO} [V]	V _{ECCO} [V]						
NJL5303R	built in Green LED	60	20	16	6	0.2	12 to 50	30	MSL5	1.9x2.6x0.8	COBP
NJL5304R (Under Development)	Optical filtered PTR	85	15	20	5				MSL5	3.15x4.35x0.8	COBP
NJL5310R	built in Two Green LED	85	15	35(VR)		0.2	7 to 20	0.4/0.25 (V _R =2.5V)	MSL5	3.15x4.35x0.8	COBP
NJL5311R	Two Green LEDs & Optical filtered PD	85	15	35(VR)		0.2	6 to 18	0.25/0.25 (V _R =2.5V)	MSL5	3.15x4.35x0.8	COBP
NJL5312R	Two Green LEDs & Optical filtered PD	85	15	35(VR)		0.2	2.1 to 11	0.3/0.3 (V _R =2.5V)	MSL5	3.15x4.7x0.8	COBP
NJL5313R	Two Green LEDs & Optical filtered PD	85	15	35(VR)		0.2	0.8 to 7	0.4/0.4	MSL5	3.15x6x0.65	COBP
NJL5501R	Red & Infrared LED	85	30	16	6	5(RE) 1(IR)	1000 to 4300 (RED) 145 to 580(IR)	20	MSL5	1.9x2.6x0.8	COBP
NJL5510R	PD & Red & IR	85	50(RE) 50(IR)	35(VR)		0.1(RE) 0.1(IR)	2.5 to 8(RE) 0.6 to 1.8(IR)	0.25(RE) 0.4(IR)	MSL5	2.4x3.75x0.8	COBP
NJL5513R	Red & IR & Two Green LEDs	85	50(RE) 50(IR) 15(GREEN)	35(VR)		0.1(RE) 0.1(IR) 0.2(GREEN)	8 to 22(RE) 2 to 12(IR) 2 to 10(GREEN)	0.25(RE) 0.3(IR) 0.25(GREEN)	MSL5	3.2x5.0x0.65	COBP
NJL5901AR	Transistor Output	60	30	16	6	2	180 to 450	30	MSL5	1.6x2.4x0.8	COBP
NJL5901AR-1	Transistor Output	60	30	16	6	5	280 to 700	30	MSL5	1.3x1.6x0.6	COBP
NJL5901R-2	Transistor Output	60	20	16	6	5	165 to 412	20	MSL5	1.0x1.4x0.6	COBP
NJL5902R	Transistor Output	60	30	16	6	0.2	90 to 250	30	MSL5	1.9x2.6x0.8	COBP
NJL5902R-1	Transistor Output	60	30	16	6	0.5	160 to 400	30	MSL5	1.6x2.0x0.6	COBP
NJL5902R-2	Transistor Output	60	20	16	6	0.5	62 to 155	20	MSL5	1.2x1.7x0.6	COBP
NJL5908AR	Transistor Output	60	20	16	6	2	92 to 230	20	MSL5	1.06x1.46x0.5	COBP
NJL5909RL-4	with LENS (Focal length 4mm)	60	30	16	6	0.2	35 to 175	30	MSL5	1.9x2.6x1.6	COBP

Ambient Light Sensors

Part No.	Absolute Maximum Ratings VR [V]	Peak Wavelength [nm] typ.	Dark Current [nA] max.	MSL (Moisture Sensitivity Levels)	Package Size [mm] typ.	Package Outline	Notes
NJL6502R-1	6	580	0.5	MSL5	1.7x1.2x0.8	COBP	
NJL7302L-F3	15	550	100				
NJL7302L-F5	15	550	100				
NJL7502L	70	560	100				
NJL7502R	35	590	100	MSL5	1.6x1.3x0.65	COBP	

Position Sensors

Part No.	Recommended operating conditions			Detector Operating Current I _{cc} typ. [μA]	Output Signals	Resolution [LPI]	MSL (Moisture Sensitivity Levels)	Package Size [mm] typ.	Package Outline
	Emitter Forward Current I _F [mA]	Detector Supply Voltage V ₊ [V]	Sensor -Reflector Distance d [mm]						
NJL5820R	2 to 10	2.7 to 5.5	0.5 to 1.5	150	2 Phase Digital (0°, 90°)	50.8	MSL5	2.6x2.5x0.8	COBP
NJL9101R	5	2 to 3.3	0.5		2 Phase Analog (0°, 90°, 180°)	100.8	MSL5	2.3x2.0x0.8	COBP

LED Driver ICs

White LED Drivers

Part No.	Key Features	Operating Voltage [V] min./max.	LED Serial Connect	Number of channel [ch.]	LED Current [mA/ch.]	LED Pin Voltage [V] max.	Brightness control	Package Outline	Notes
NJU6080	Linear Type Constant Current	2.5 to 5.5	1 Series	1	100	5.5	PWM	SOT-23-6-1	
NJW4605	I ² C Control Very low-luminance Wide Operating Temperature	6 to 30	8 Series	3	80		PWM	SSOP32	
NJW4615A	Linear Type Constant Current	2.5 to 35	10 Series	1	100	35	PWM	SOT-23-6-1	
NJW4616	Linear Type Constant Current	2.5 to 40	10 Series	1	300	40	PWM	SOT-89-5-2	
NJW4617	Linear Type Constant Current	2.5 to 40	10 Series	1	500	40	PWM	TO-252-5-L3	

RGB LED Drivers

Part No.	Operating Voltage [V] min./max.	Number of channel [ch.]	LED Current [mA/ch.]	Brightness control	PWM steps [steps/ch.]	Package Outline	Notes
NJU6060	2.4 to 5.5	3	10	PWM	32	SSOP10	
NJU6061	1.7 to 5.5	3	30	PWM	128	SSOP14	
NJU6062	1.8 to 5.5	4	30	PWM	256	SSOP14	
NJU6063	1.8 to 5.5	3	30	PWM	128	SSOP14	

IO Port Expansion ICs(LED)

Part No.	Operating Voltage [V] min./max.	Output Current [mA]	Output Port	Interface	Cascade	Package Outline	Notes
NJU3711	4.5 to 5.5	25	8	Serial		DIP14 DMP14 SSOP14	
NJU3711A	2.4 to 5.5	25	8	Serial		SSOP14	
NJU3712	4.5 to 5.5	25	8	Serial	Yes	DIP16 DMP16	
NJU3712A	2.4 to 5.5	25	8	Serial	Yes	SSOP16	
NJU3715A	2.4 to 5.5	25	16	Serial		SSOP24-C2	
NJU3716A	2.4 to 5.5	25	16	Serial	Yes	SSOP24-C2	
NJU3719A	2.4 to 5.5	25	24	Serial		SSOP32	
NJW4828-A	4 to 5.5	600	8	Parallel		SDIP22	
NJW4828-B	3 to 5.5	300	8	Parallel		HTSSOP24-P1	

LCD Drivers

Bit Map Type LCD Drivers

Part No.	Key Features	Display Size		DDRAM [bit]	Operating Voltage		Interface	Voltage Booster	Duty	E.V.R. [Step]	Package Outline
		Com	Seg		V _{DD} [V]	V _{LD} [V] max.					
NJU6450A	Int. Oscillator 18KHz	16	61	2560	5	V _{DD} -13.5	8bit		1/16, 1/32		Chip
NJU6451A	Combination with NJU6450A		80	2560	5	V _{DD} -13.5	8bit		1/16, 1/32		Chip
NJU6573	3x Booster	16	100	1600	3.3	10	Serial	x3	1/16	16	LQFP144-L1
NJU6815	16GS, Partial Display	128	80(RGB)	122880	3	18	16bit/8bit/Serial	x2 to x6	Auto	128	Bumped Chip
NJU6818	16GS, Partial Display	80	104(RGB)	99840	3	18	16bit/8bit/Serial	x2 to x6	Auto	128	Bumped Chip

Character Type LCD Drivers

Part No.	Display			Operating Voltage		Voltage Booster	Duty	Icon	Package Outline	Notes
	Output	Channel	Line	V _{DD} [V]	V _{LD} [V] max.					
NJU6415	80			5	V _{DD} -13.5				Chip	V _{DD} (5V±10%)
NJU6416	80			5	V _{DD} -13.5				Chip	V _{DD} (5V±10%)
NJU6420B		16	2	3/5	V _{DD} -13.5	x2	1/16, 1/32		Chip	
NJU6424		10	3	3	V _{DD} -13.5	x3	1/26	100	Chip	
NJU6426		8	4	5	V _{DD} -13.5	x2	1/36	40	Chip	
NJU6445	80			5	V _{DD} -10				Chip	V _{DD} (5V±10%)
NJU6446	80			5	V _{DD} -10				Chip	V _{DD} (5V±10%)
NJU6468		8	2	3/5	V _{DD} -13.5		1/8, 1/11 1/16		Chip	
NJU6515		10	1	3	V _{DD} -5.5	x3	1/8, 1/9	118	Chip	
NJU6627		10	3	5	10	x2	1/16, 1/23	100	Chip	
NJU6645		16	3	2.4 to 3.6	17	x6	1/18, 1/34 1/50, 1/66 1/82, 1/98	512	Bumped Chip	

Segment Type LCD Drivers

Part No.	Key Features	Display Size Seg	Operating Voltage		Interface	Duty	Package Outline
			V _{DD} [V]	V _{LD} [V] max.			
NJU6432B		104	5	6.5	Serial	1/2	QFP64-H1
NJU6433B	V _{LD} =3V Support	200	3/5	V _{DD} -6.5	Serial	1/4	Chip QFP64-H1
NJU6434	P-sub	200	3/5	6	Serial	1/4	Chip LQFP64-H2 QFN64-S4
NJU6532		96(84), 128(112)	3/5	8	Serial	1/3, 1/4	LQFP48-R3 SSOP44
NJU6533	Low Power Consumption	96, 128	3/5	5.5	Serial	1/3, 1/4	Chip LQFP48-R3 LQFP52-H2 QFN48-Q1 QFP52-A2
NJU6535	Key Scan	126, 164	5	5.5	Serial	1/3, 1/4	QFP64-H1
NJU6541A	Key Scan	120, 240 360, 480	3/5	6	I ² C	1/1, 1/2 1/3, 1/4	LQFP144-L1
NJU6541B	Key Scan	120, 240 360, 480	3/5	6	Serial	1/1, 1/2 1/3, 1/4	LQFP144-L1
NJU6543	EVR	256, 368, 512	3/5	6	Serial	1/2, 1/3, 1/4	LQFP144-L1
NJU6549	Voltage Booster	200, 600 800, 1600 1800	5	12	Serial	1/1, 1/3 1/4, 1/8 1/9	Bumped Chip

Quartz Crystal Oscillator ICs

Fundamental Oscillator ICs

Part No.	Voltage Regulator	Oscillation Frequency [MHz]	Operating Voltage [V] min./max.	I _{DD} @V _{DD} =3.3V	Divider	Output	Package Outline	Chip Size [mm] typ.	Notes
NJU6212 Series	Yes	to 60	1.62 to 3.63	5(typ.)	to f ₀ /8	C-MOS	Chip	0.7x0.75	
NJU6221 Series	Yes	to 60	1.62 to 3.63	2(typ.)	to f ₀ /64	C-MOS	Thin-Chip Wafer	0.73x0.63	
NJU6222 Series		20 to 50	1.62 to 3.63	5.5(typ.)	to f ₀ /2	C-MOS	Thin-Chip Wafer	0.58x0.5888	For Special High Quality Audio Sound
NJU6229 Series	Yes	32.768kHz	1.62 to 3.63	1.45uA(typ.)		C-MOS	Thin-Chip Wafer	0.53x0.53	
NJU6311 Series		to 50	2 to 5	8(max.)	to f ₀ /32	C-MOS	Thin-Chip MSOP10(VSP10)	0.7x0.95	
NJU6318 Series		to 50	3 to 6	15(max.) @5V	to f ₀ /8	TTL	Chip EMP8	1.33x0.8	
NJU6321 Series		to 50	3 to 6	10(max.) @5V	to f ₀ /8	C-MOS	Chip EMP8 MSOP8(VSP8)	1.21x0.8	
NJU6322 Series		to 50	3 to 6	10(max.) @5V	to f ₀ /8	TTL	Chip EMP8	1.24x0.8	
NJU6323 Series		to 50	3 to 6	10(max.) @5V	to f ₀ /8	C-MOS	Chip EMP8	1.28x0.8	
NJU6324 Series		to 50	3 to 6	10(max.) @5V	to f ₀ /8	C-MOS	Chip EMP8	1.24x0.8	
NJU6360 Series		to 50	2.7 to 5.5	8(max.)	to f ₀ /32	C-MOS	Thin-Chip	0.7x0.75	
NJU6363 Series		to 40	1.5 to 3.6	2.5(max.)	to f ₀ /32	C-MOS	Thin-Chip	0.7x0.75	
NJU6364 Series		to 60	2 to 3.6	3.5(max.)	to f ₀ /32	C-MOS	Thin-Chip	0.7x0.75	
NJU6365 Series		to 32	1.8 to 3.6	1.5(max.)	to f ₀ /32	C-MOS	Thin-Chip	0.7x0.75	
NJU6366 Series		to 50	2 to 5.5	6(max.) @3V	to f ₀ /8	C-MOS	Thin-Chip SOT-23-6-1	0.67x0.75	

Fundamental Oscillator ICs

Part No.	Voltage Regulator	Oscillation Frequency [MHz]	Operating Voltage [V] min./max.	I_{DD} @ $V_{DD}=3.3V$	Divider	Output	Package Outline	Chip Size [mm] typ.	Notes
NJU6367 Series		to 50	2 to 5.5	6(max.) @3V	to $f_0/32$	C-MOS	Thin-Chip	0.7x0.75	
NJU6368 Series		to 50	2.7 to 5.5	8(max.)	to $f_0/8$	C-MOS	Thin-Chip SOT-23-6-1	0.67x0.75	
NJU6369 Series		to 50	1.5 to 3.6	5(max.)	to $f_0/32$	C-MOS	Thin-Chip	0.7x0.75	
NJU6385		20 to 50	1.62 to 3.63	5.5(typ.)		C-MOS	DFN6-G1		For Special High Quality Audio Sound

3rd. Over Tone Oscillator ICs

Part No.	Product Version (Oscillation Frequency) [MHz]	Operating Voltage V_{DD} [V] min./max.	I_{DD} @ $V_{DD}=3.3V$	Output	Package Outline	Chip Size [mm] typ.	Notes
NJU6227 Series	x1 (40 to 50) x2 (50 to 60) x3 (60 to 85) x4 (85 to 110) x5 (110 to 130) x6 (130 to 160)	1.62 to 3.63 1.62 to 3.63 2.25 to 3.63 2.25 to 3.63 2.25 to 3.63 2.25 to 3.63	3.1(typ.) 3.6(typ.) 7.0(typ.) 7.8(typ.) 8.2(typ.) 9.2(typ.)	C-MOS	Thin-Chip Wafer	0.73x0.63	Built-in Voltage Regulator
NJU6376 Series	G (30 to 40) H (40 to 50) J (50 to 60) K (60 to 75)	2.2 to 5.5	8(max.) @3V 10(max.) @3V 11(max.) @3V 12(max.) @3V	C-MOS	Chip SOT-23-6-1	0.7x0.75	
NJU6377 Series	E (30 to 40) F (40 to 50) G (50 to 60) H (60 to 75) J (45 to 55) K (40 to 50)	2.2 to 5.5	8(max.) @3V 10(max.) @3V 11(max.) @3V 12(max.) @3V 11(max.) @3V 11(max.) @3V	C-MOS	Thin-Chip	0.7x0.75	
NJU6391 Series	A (20 to 35) B (35 to 50) C (45 to 75)	2.4 to 3.6	6(typ.) @3V 9(typ.) @3V 9(typ.) @3V	C-MOS	Chip EMP8	1.29x0.8	
NJU6392 Series	A (20 to 35) B (35 to 50) C (45 to 75) P (to 75)	2.4 to 3.6	6(typ.) @3V 9(typ.) @3V 9(typ.) @3V 9(typ.) @3V	C-MOS	Chip EMP8	1.29x0.8	
NJU6393	(40 to 65)	2.2 to 2.8	8(typ.) @2.5V	C-MOS	Chip Thin-Chip	1.29x0.8	
NJU6394 Series	A (75 to 90) B (90 to 105) C (105 to 125)	1.6 to 3.6	6(typ.) @1.8V 7(typ.) @1.8V 8(typ.) @1.8V	C-MOS	Thin-Chip	0.7x0.75	
NJU6395 Series	A (85 to 110) B (105 to 125)	2.7 to 5.5 2.4 to 3.6	25(typ.) @3V 20(typ.) @1.8V	C-MOS	Chip Thin-Chip EMP8	1.24x0.8	
NJU6396	(135 to 166)	2.7 to 3.6	27(typ.) @3.3V	C-MOS	Thin-Chip	0.7x0.75	
NJU6397Series	A (70 to 90) B (90 to 110) C (110 to 135)	2.3 to 3.6	13(typ.) @3.3V 13(typ.) @3.3V 18(typ.) @3.3V	C-MOS	Thin-Chip Wafer	0.7x0.75	
NJU6397D	(100 to 125)	2.25 to 2.75	13(typ.) @2.5V	C-MOS	Thin-Chip Wafer	0.7x0.75	
NJU6398	(110 to 160)	2.7 to 3.6	27(typ.) @3.3V	LVDS	Thin-Chip	1.55x1.7	

VCXO IC

Part No.	Oscillation Frequency [MHz]	Operating Voltage V_{DD} [V] min./max.	I_{DD} @ $V_{DD}=3.3V$	Output	Package Outline	Chip Size [mm] typ.	Notes
NJM2555	120(240) to 160(640)	3 to 3.6	50(typ.) @3.3V	LVPECL Equivalent	Chip SSOP10	1.6x2.0	

Microprocessor Peripheral ICs

IO Port Expansion ICs(MPU)

Part No.	Operating Voltage V_{DD} [V] min./max.	Output Current [mA]	Output Port	Interface	LED Drive	Package Outline	Key Features
NJU3711	4.5 to 5.5	25	8	Serial	Yes	DIP14 DMP14 SSOP14	
NJU3711A	2.4 to 5.5	25	8	Serial	Yes	SSOP14	
NJU3712	4.5 to 5.5	25	8	Serial	Yes	DIP16 DMP16	
NJU3712A	2.4 to 5.5	25	8	Serial	Yes	SSOP16	
NJU3715A	2.4 to 5.5	25	16	Serial	Yes	SSOP24-C2	
NJU3716A	2.4 to 5.5	25	16	Serial	Yes	SSOP24-C2	
NJU3719A	2.4 to 5.5	25	24	Serial	Yes	SSOP32	
NJU3730	4.5 to 5.5		3	I ² C		MSOP8(VSP8)	
NJU3754	2.7 to 5.5		11-Input	Serial		SSOP16	
NJU6010	2.4 to 5.5		4-Output x 6-Input	Serial		SSOP16	Oscillator key-scan circuit Key-Register and Power on Reset Circuit

RS-232C line Driver/ Receivers

Part No.	Operating Voltage [V] min./max.	Driver/ Receiver	Package Outline	Notes
NJU6402B	4.5 to 5.5 4.5 to 12 -12 to -4.5	Receiver-3/ Driver-3	DIP16 DMP16	

RTCs

Part No.	Key Features	Operating Voltage [V] min./max.	Timekeeper voltage [V] min./max.	Output Port	Interface	Package Outline	Notes
NJU6350	Serial Interface RTC, Low Battery Detector Oscillation Circuit	2.4 to 3.6	2 to 3.6	3	Serial	MSOP8(VSP8)	
NJU6355 Series	Serial Interface RTC for 4-bit MPU Oscillation Circuit	4.5 to 5.5	2 to 5.5	4	Serial	DIP8 DMP8	
NJU6356 Series	Serial Interface RTC for 4-bit MPU Oscillation Circuit	4.5 to 5.5	2 to 5.5	4	Serial	DIP8 DMP8	

ASSP(Others) ICs

Part No.	Key Features	Operating Voltage [V] min./max.	Package Outline	Notes
NJM2342	Quad Buffer for Reference Circuit	2 to 14	MSOP10(TVSP10)	I _{cc} =1mA(typ.), Sink/Source Buffer
NJM4151	Frequency Operation from 1Hz-100kHz	8 to 22	DIP8 DMP8	8V < V ₊ < 15V (3.5mA typ.) 16V < V ₊ < 22V (4.5mA typ.)
NJU6495	Quad Pin Electronics Driver	8 to 15	LQFP64-H2	Max. 50MHz Operation Max. 15V Output Range
NJU6496	Quad PIN-Electronics Drivers / Comparators / Analog Switches	10 to 15	QFN84-D4	Comparator and Analog Switch for kelvin Max. 45MHz Operation Max. 15V Output Range
NJW5210	R-2R System, 8bit 3channel D/A Converters	2.7 to 5.5	MSOP8(TVSP8)	
NJW5211	R-2R System, 8bit 8channel D/A Converters	2.7 to 5.5	SSOP14	

A/D Converters

Part No.	Key Features	Operating Voltage [V] min./max.	A/D Conversion	Package Outline	Notes
NJU3610	Digital Filter High-Pass Filter Stereo 4-1 Selectors		1bit Delta-Sigma stereo ADC	LQFP48-R3	Single power supply: 3.0 to 3.6V (Built-in regulator using together) Two power supply: Analog(3.0 to 3.6V) Digital(1.65 to 2.0V)
NJU9101	Built-in Low Power OP-Amp(2 circuits) Precision Amplifier Programmable Gain Pre-Amplifier (1 to 8V/V)	2.4 to 3.6	16-Bit ΔΣ ADC	EQFN-24-LE	High RF noise tolerance Programmable Cell Bias Voltage System Calibration for offset & gain drift
NJU9252P	LCD Display, Sample/Hold Circuit	4.5 to 5.5	8bit Resolution Successive Approximation Method	DMP20	

Analog Switches

Part No.	Supply Voltage	Quiescent Current	On-state Resistance [ohm] typ.	Package Outline	Notes
NJU201A	44	1.2mA typ.(V ⁺ /V ⁻ =±15V)	50	DIP16 DMP16	Turn-on Time 480ns typ. Turn-off Time 370ns typ.
NJU211	40	1.15mA typ.(V ⁺ /V ⁻ =±15V)	115	DIP16 DMP16	Turn-on Time 460ns typ. Turn-off Time 360ns typ.
NJU4051B	20	5uA max.(V _{DD} =5V)	220	DIP16 DMP16 SSOP16	
NJU4052B	20	5uA max.(V _{DD} =5V)	220	DIP16 DMP16 SSOP16	
NJU4053B	20	5uA max.(V _{DD} =5V)	220	DIP16 DMP16 SSOP16	
NJU4066B	20	0.25uA max.(V _{DD} =5V)	300	DIP14 DMP14 SSOP14	
NJU7301	44	1.2mA typ.(V ⁺ /V ⁻ =±15V)	115	DIP16 DMP16	Turn-on Time 480ns typ. Turn-off Time 370ns typ.

Note) MSOP8(TVSP8) : MEET JEDEC MO-187-DA / MSOP10(TVSP10) : MEET JEDEC MO-187-DA / MSOP8(TVSP8) : MEET JEDEC MO-187-DA THIN TYPE / MSOP10(TVSP10) : MEET JEDEC MO-187-DA THIN TYPE

SAW Filters

for GPS

Part No.	Application	Center Frequency f ₀ [MHz]	Passband Width [MHz]	Package Size [mm]	Notes
NSVS999	GPS-L5	1176.45	20	3.0×3.0×1.15	
NSVS1108	GPS-L2	1227.6	20	3.0×3.0×1.15	
NSVS1246	GPS-L1	1575.42	2	2.0×1.6×0.65	Ultra Low Loss Type
NSVS1174	GPS-L1	1575.42	2	3.0×3.0×1.15	
NSVS9013A	GPS-L1	1575.42	2	2.0×1.6×0.65	High ATT Type
NSTS9110A	GPS-L1	1575.42	2	2.0×1.6×0.65	Low Loss Type
NSTS9116A	GPS+GLONASS	1589.5	32	2.0×1.6×0.65	Low Loss Type
NSTS9117A	GPS+GLONASS	1589.5	32	2.0×1.6×0.65	High ATT Type
NSNJ9200A	GNSS GPS GLONASS Beidou	1582.471	4.092 2 8.34	2.0×1.6×0.65	High ATT Type

PATENT : JP2601543, JP2933171, JP2673993, JP2131273, JP3293671, JP3181158, US5175519, US5521453, US5252882, US5471722, US5523641, JP2673993, JP3194849, US5252882, US5471722, US5523641

for Automotive

Part No.	Application	Center Frequency f ₀ [MHz]	Passband Width [MHz]	Package Size [mm]	Notes
NSVS1102	Keyless Entry Systems	312.15	1	3.0×3.0×1.15	
NSVS1153	Keyless Entry Systems	314	1	3.0×3.0×1.15	
NSVS9012	Keyless Entry Systems	314.85	0.6	3.0×3.0×1.15	
NSVS9016	Keyless Entry Systems	315	0.6	3.0×3.0×1.15	
NSVS1154	Keyless Entry Systems	315	1	3.0×3.0×1.15	
NSTS9118	Keyless Entry Systems	433.92	0.4	3.0×3.0×1.15	
NSVS1104	Keyless Entry Systems	433.92	1	3.0×3.0×1.15	
NSVS1231	Keyless Entry Systems	868	4	3.0×3.0×1.15	
NSTS9119	ITS	760	9	3.0×3.0×1.15	High ATT Type

PATENT : JP2673993, JP3194849, US5252882, US5471722, US5523641

for Low Power Transceiver

Part No.	Application	Center Frequency f ₀ [MHz]	Passband Width [MHz]	Package Size [mm]	Notes
NSVS1237	US AMR	909	14	3.0×3.0×1.15	Lower-Half
NSVS1127	US AMR	915	26	3.0×3.0×1.15	
NSVS1240	US AMR	915	26	3.0×3.0×1.15	
NSVS1245	US AMR	921	14	3.0×3.0×1.15	Upper-Half
NSVS1231	EU AMR	868	4	3.0×3.0×1.15	
NSTS1444	JAP AMR	924	8	3.0×3.0×1.15	
NSTS1449	JAP AMR	924	8	3.0×3.0×1.15	
NSNJ2014	AMR(ASIA)	922.5	5	2.0×1.6×0.65	CHK/HKG/THA
NSVS1105	Transceiver	422.2	1	3.0×3.0×1.15	
NSVS1145	Transceiver	426	1	3.0×3.0×1.15	
NSTS1431	Transceiver	426.42	1	3.0×3.0×1.15	
NSVS1093	Transceiver	429.42	1	3.0×3.0×1.15	
NSVS1126	Transceiver	429.42	1	3.0×3.0×1.15	
NSVS1106	Transceiver	440	1	3.0×3.0×1.15	
NSNJ2007	Transceiver	446.05	0.1	3.0×3.0×1.15	
NSNJ2006	Transceiver	465	6	3.0×3.0×1.15	
NSVS1271	Radio Microphones	322.25	1	3.0×3.0×1.15	

for PHS

Part No.	Application	Center Frequency f ₀ [MHz]	Passband Width [MHz]	Package Size [mm]	Notes
NSTS1437	PHS-RF base station	1902	35.2	3.0×3.0×1.15	

MEMS

MEMS Microphone

Part No.	Function	Operating Voltage [V]	Static Capacitance [pF]	Package Outline	Chip Size	Notes
NJD3002	MEMS Transducer for Microphone	11.5	1.2	Wafer	1.3x1.3mm	
NJD3004/L	MEMS Transducer for Microphone	12.5	0.86	Wafer	1.1x1.1mm	
NJD3006H/L	MEMS Transducer for Microphone	12.5	0.65	Wafer	0.8x0.8mm	

MEMS Microphone Amplifiers

Part No.	Function	Operating Voltage [V]	Quiescent Current [uA]	Input Equivalent Noise	SNR	Output Voltage	Package Outline	Notes
NJU72084	Pre-Amplifier for MEMS Microphone	+1.5 to +3.6	80	3uVrms		281mVrms (-11dBV)@THD<5%	Wafer	
NJU72085	Pre-Amplifier for MEMS Microphone	+1.5 to +3.6	80	3uVrms		281mVrms (-11dBV)@THD<5%	Wafer	Tight Sensitivity Tolerance
NJU72086	Pre-Amplifier for MEMS Microphone	+1.5 to +3.6	42	3uVrms		281mVrms (-11dBV)@THD<5%	Wafer	Low Power High PSRR
NJU72087	Pre-Amplifier for MEMS Microphone	+1.5 to +3.6	115	3uVrms		281mVrms (-11dBV)@THD<5%	Wafer	High AOP Tight Sensitivity Tolerance
NJU9553	Digital Pre-Amplifier for MEMS Microphone	+1.64 to +3.6	650		59dB		Wafer	PDM Output
NJU9555	Digital Pre-Amplifier for MEMS Microphone	+1.64 to +3.6	600		62.5dB		Wafer	PDM Output Tight Sensitivity Low Power

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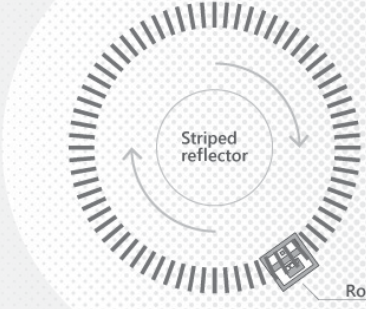
Position sensors

for Industrial equipment

No Hall IC required

High accuracy detection
rotation, direction and speed





Rotational direction and speed detection with one sensor

Parts No. **NJL5820R**

Design Tools

Application Simulator

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Design / Support

Application Simulator

Select chip NJW4131A

Vin 12 V

Vout 24 V

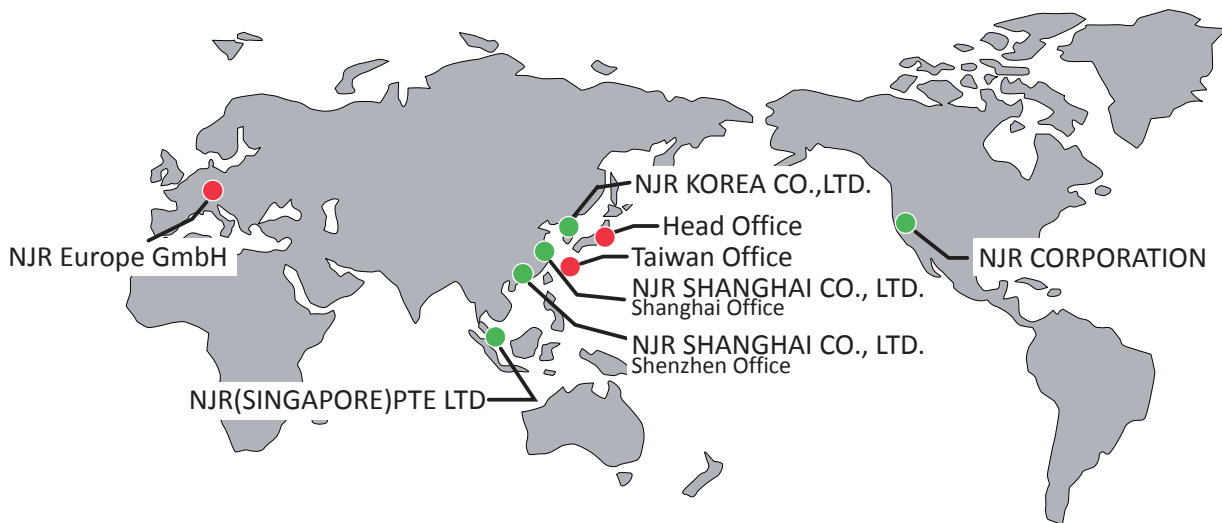
Iout 0.5 A

Switching Frequency 700 KHz

Products List

Part No.	Features
NJW1616	Internal 20V MOSFET Switching Regulator IC for Buck Converter (Switching Current = 0.8A(min.))
NJW1933	Internal 40V MOSFET Switching Regulator IC for Buck Converter (Switching Current = 0.8A(min.))
NJW4128	Internal 40V MOSFET Switching Regulator IC for Buck Converter (Switching Current = 3.6A(min.))
NJW4131A	Internal 40V MOSFET Switching Regulator IC for Boost Converter (Switching Current = 1.4A(min.))
NJW4131B	Internal 40V MOSFET Switching Regulator IC for Boost Converter (Switching Current = 1.0A(min.))
NJW4132	Internal 45V MOSFET Switching Regulator IC for Boost Converter (Switching Current = 1.75A(min.))
NJW4140	MOSFET Drive Switching Regulator IC for Boost / Fly-back Converter (depends on ext FET)
NJW4141	2-Phase Boost Converter Switching Regulator IC
NJW4150A	Internal 40V MOSFET Switching Regulator IC for Buck Converter (Switching Current = 0.3A(min.))
NJW4152A	Internal 45V MOSFET Switching Regulator IC for Buck Converter (Switching Current = 1.4A(min.))
NJW4152B	Internal 45V MOSFET Switching Regulator IC for Buck Converter (Switching Current = 0.8A(min.))
NJW4153	Switching Regulator IC for Buck Converter Current Mode Control w/ 40V/1A MOSFET (Switching Current = 1.4A(min.))
NJW4154	Switching Regulator IC for Buck Converter Current Mode Control w/ 40V/3A MOSFET (Switching Current = 4.5A(min.))
NJW4155	Internal 40V MOSFET Switching Regulator IC for Buck Converter (Switching Current = 2.7A(min.))
NJW4160	MOSFET Drive Switching Regulator IC for Buck Converter (depends on ext FET)
NJW4161	MOSFET Drive Switching Regulator IC for Buck Converter (depends on ext FET)
NJW4162A	2channel MOSFET Drive Switching Regulator IC for Buck Converter (depends on ext FET)
NJW4170	Internal 40V MOSFET Switching Regulator IC for Buck Converter (Switching Current = 1.4A(min.))

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