

■ 4-Bit Single Chip Microcomputers, MN1500 Family

Category	Type No.	ROM (K Byte)	RAM (×4-bit)	Input/ Output (Lines)	Speed (μs)	Supply Voltage (typ) (V)	Package		Remarks
								No.	
General purpose	MN1551A2	1	96	23	1 6	4.5 to 5.5 2.5 to 5.5	SDIP028-P-0400 SOP028-P-0375	L20/L40	LED drive No support tool
	MN150402	4	320	32	1.91 4	2.6 to 5.5 2.2 to 5.5	QFP044-P-1010	L50	OTP available (ES)
	MN150202	2	128	32	1.91 4	2.6 to 5.5 2.2 to 5.5	QFP044-P-1010	L50	OTP available (ES)
	MN150401	4	320	54	1.91 4	2.6 to 5.5 2.2 to 3.5	QFP064-P-1414	L60	OTP available (ES)
	MN150602	6	320	32	1.91 4	2.6 to 5.5 2.2 to 5.5	SDIP042-P-0600	L22	OTP available (ES)
	MN155201	2	128	23	4 1	2.0 to 5.5 4.5 to 5.5	SDIP028-P-0400 SOP028-P-0375 QFH032-P-0707	L20/L40 L44	Without A/D
	▲MN15P0802	8	320	32	1.91	4.5 to 5.5	QFP044-P-1010 SDIP042-P-0600	L50/L22	One time version (ES)
	MN155202	2	128	21	4 1	2.0 to 5.5 4.5 to 5.5	SDIP028-P-0400 SOP028-P-0375	L20/L40	10-bit A/D input
	MN155402	4	192	21	4 1	2.0 to 5.5 4.5 to 5.5	SDIP028-P-0400 SOP028-P-0375 QFH032-P-0707	L20/L40 L44	10-bit A/D input
	MN15P5402	4	256	23	1 to 4	4.5 to 5.5	SOP028-P-0375 SDIP028-P-0400	L40/L20	One time version
	MN150837	8	512	33	0.95 1.91 122	2.7 to 5.5 1.8 to 5.5	QFP044-P-1010	L50	Without A/D
MN151233	12	512	54	0.95 1.91 122	2.7 to 5.5 1.8 to 5.5	QFP064-P-1414	L60	Without A/D	
Analog input comparator & A/D converter	▲MN151630	16	512	54	1.00 1.91 8 15.28	4.5 to 5.5 2.6 to 5.5 2.2 to 5.5 2.2 to 5.5	QFP084-P-1818E	L73	10-bit A/D input LCD driver
	▲MN150831	8	512	33	1 2	4.5 to 5.5 1.8 to 5.5	QFP044-P-1010	L50	10-bit A/D
	▲MN150222	2	96	15 (16)*	1 4 8	4.5 to 5.5 2.0 to 5.5 1.8 to 5.5	SOP020-P-0300 SDIP022-P-0300	L35 L19	10-bit A/D *During selection of CR
	▲MN150120	1	64	15 (16)*	1 4 8	4.5 to 5.5 2.0 to 5.5 1.8 to 5.5	SOP020-P-0300 SDIP022-P-0300	L35 L19	Comparators *During selection of CR
LCD driver	MN150413	4	256	26	0.94 1.818	2.7 to 5.5 1.8 to 5.5	QFP064-P-1414	L60	Remote control output
	MN150813	8	432	26	0.94 1.818	2.7 to 5.5 1.8 to 5.5	QFP064-P-1414	L60	Remote control output
	MN158851A	8	432	32	1 8	4.5 to 5.5 2.5 to 5.5	QFP084-P-1818	L72	
	MN150810	8	512	40	0.95 1.91 122	4.5 to 5.5 2.6 to 5.5 2.2 to 5.5	QFP064-P-1414	L60	
LED driver	MN1551A2	1	96	23	1 6	4.5 to 5.5 2.5 to 5.5	SDIP028-P-0400 SOP028-P-0375	L20/L40	No support tool
Remote control	MN150414	4	256	22	2	1.8 to 3.6	SOP028-P-0375	L40	Ordinary port
	MN150814	8	320	22	2	1.8 to 3.6	SOP028-P-0375	L40	Ordinary port
	MN151614	8 (Table 8K)	320	22	2	1.8 to 3.6	SOP028-P-0375	L40	Ordinary port
	MN150413	4	256	26	0.94 1.818	2.7 to 5.5 1.8 to 5.5	QFP064-P-1414	L60	LCD driver
	MN150813	8	432	26	0.94 1.818	2.7 to 5.5 1.8 to 5.5	QFP064-P-1414	L60	LCD driver
Telephone	MN150409	4	256	33	1.1 2.2 17.6	4.5 to 5.5 3.0 to 5.5 2.2 to 5.5	SDIP042-P-0600 QFP044-P-1010	L22/L50	OTP available (ES)
	MN150609	6	512	33	1.1 2.2 17.6	4.5 to 5.5 3.0 to 5.5 2.2 to 5.5	SDIP042-P-0600 QFP044-P-1010	L22/L50	OTP available (ES)
	MN150832	8	512	55	1.1 2.2 17.6	4.5 to 5.5 3.0 to 5.5 2.2 to 5.5	QFP064-P-1414	L60	OTP available (ES)
Channel selection	MN152810	8	320	20	2	4.5 to 5.5	SDIP052-P-0600	L23	
	MN152811	8	256	17	2	4.5 to 5.5	SDIP042-P-0600	L22	
Home appliances (Note)	MN150404	4	256	32	1.91 4	2.6 to 5.5 2.2 to 5.5	QFP064-P-1414	L60	LCD driver OTP available
	MN150804	8	384	32	1.91 4	2.6 to 5.5 2.2 to 5.5	QFP064-P-1414	L60	LCD driver OTP available

▲ Under development

Note) Compared to usual microcomputers, microcomputers for the electrical home appliances are prevented from wrong operation by external noises, because reset pin, interrupt input pin and oscillator input pin have enhanced-anti-noise characteristics and their pin assignments are in consideration for noises.