

4-Bit, Single-Chip CMOS Microcomputers; 75xx Series

Device (μPD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
7502/7502A	LCD controller/driver	0.41	2.5 to 6.0	2K	128	23	QFP	64
7503/7503A	LCD controller/driver	0.41	2.5 to 6.0	4K	224	23	QFP	64
7507	General-purpose	0.41	2.5 to 6.0	2K	128	32	DIP SDIP QFP	40 40 52
7507B	General-purpose	0.5	2.2 to 6.0	2K	128	32	SDIP QFP	40 44
7507H	General-purpose	4.19	2.7 to 6.0	2K	128	32	DIP SDIP QFP	40 40 52
7508	General-purpose	0.41	2.5 to 6.0	4K	224	32	DIP SDIP QFP	40 40 52
7508B	General-purpose	0.5	2.2 to 6.0	4K	224	32	SDIP QFP	40 44
7508H	General-purpose	4.19	2.7 to 6.0	4K	224	32	DIP SDIP QFP	40 40 52
75CG08	Piggyback EPROM	0.41	4.5 to 5.5	2K or 4K	224	32	Ceramic DIP	40
75CG08H	Piggyback EPROM	4.19	4.5 to 5.5	2K or 4K	224	32	Ceramic DIP	40
7527A	FIP controller/driver	0.61	2.7 to 6.0	2K	128	35	DIP SDIP	42 42
7528A	FIP controller/driver	0.61	2.7 to 6.0	4K	160	35	DIP SDIP	42 42
75CG28	Piggyback EPROM; FIP controller/driver	0.5	4.5 to 5.5	4K	160	35	Ceramic DIP	42
7533	A/D converter	0.51	2.7 to 6.0	4K	160	30	DIP SDIP QFP	42 42 44
75CG33	Piggyback EPROM; A/D converter	0.51	4.5 to 5.5	4K	160	30	Ceramic DIP	42
7537A	FIP controller/driver	0.61	2.7 to 6.0	2K	128	35	DIP SDIP	42 42
7538A	FIP controller/driver	0.61	2.7 to 6.0	4K	160	35	DIP SDIP	42 42
75CG38	Piggyback EPROM; FIP controller/driver	0.5	4.5 to 5.5	4K	160	35	Ceramic DIP	42
7554	Serial I/O; external clock or RC oscillator	0.71	2.5 to 6.0	1K	64	16	SDIP SOP	20 20
7554A	Serial I/O; external clock or RC oscillator	0.71	2.0 to 6.0	1K	64	16	SDIP SOP	20 20
75P54	Serial I/O; external clock or RC oscillator	0.71	4.5 to 6.0	1K OTPROM	64	16	SDIP SOP	20 20

† Plastic unless ceramic (or cerdip) is specified.

4-Bit, Single-Chip CMOS Microcomputers; 75xx Series (cont)

Device (μPD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
7564/7564A	Serial I/O; ceramic oscillator	0.71	2.7 to 6.0	1K	64	15	SDIP SOP	20 20
75P64	Serial I/O; ceramic oscillator	0.71	4.5 to 6.0	1K OTPROM	64	15	SDIP SOP	20 20
7556	Comparator; external clock or RC oscillator	0.71	2.5 to 6.0	1K	64	20	SDIP SOP	24 24
7556A	Comparator; external clock or RC oscillator	0.71	2.0 to 6.0	1K	64	20	SDIP SOP	24 24
75P56	Comparator; external clock or RC oscillator	0.71	4.5 to 6.0	1K OTPROM	64	20	SDIP SOP	24 24
7566/7566A	Comparator; ceramic oscillator	0.71	2.7 to 6.0	1K	64	19	SDIP SOP	24 24
75P66	Comparator; ceramic oscillator	0.71	4.5 to 6.0	1K OTPROM	64	19	SDIP SOP	24 24

† Plastic unless ceramic (or cerdip) is specified.

4-Bit, Single-Chip CMOS Microcomputers; 75xxx Series

Device (μPD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
75004	General-purpose	4.19	2.7 to 6.0	4K	512	34	SDIP QFP	42 44
75006	General-purpose	4.19	2.7 to 6.0	6K	512	34	SDIP QFP	42 44
75008	General-purpose	4.19	2.7 to 6.0	8K	512	34	SDIP QFP	42 44
75P008	General-purpose; on-chip OTPROM	4.19	4.5 to 5.5	8K OTPROM	512	34	SDIP QFP	42 44
75028	A/D converter	4.19	2.7 to 6.0	8K	512	48	SDIP QFP	64 64
75P036	A/D converter; on-chip OTPROM	4.19	2.7 to 6.0	16K OTPROM	1024	48	SDIP QFP	64 64
75048	A/D converter; 1K x 4 EEPROM	4.19	2.7 to 6.0	8K	512	48	SDIP QFP	64 64
75P056 *	A/D converter; 1K x 4 EEPROM; on-chip OTPROM	4.19	2.7 to 6.0	16K OTPROM	1024	48	SDIP QFP	64 64
* Under development; consult your NEC Sales Office for availability.								
75104	High-end with 8-bit instruction	4.19	2.7 to 6.0	4K	320	52	SDIP QFP	64 64
75104A	High-end with 8-bit instruction	4.19	2.7 to 6.0	4K	320	52	QFP	64
75106	High-end with 8-bit instruction	4.19	2.7 to 6.0	6K	320	52	SDIP QFP	64 64
75108	High-end with 8-bit instruction	4.19	2.7 to 6.0	8K	512	52	SDIP QFP	64 64
75108A	High-end with 8-bit instruction	4.19	2.7 to 6.0	8K	512	52	QFP	64

4-Bit, Single-Chip CMOS Microcomputers; 75xxx Series (cont)

Device (μ PD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
75P108	High-end with 8-bit instruction; on-chip OTPROM or UVEPROM	4.19	4.5 to 5.5	8K OTPROM	512	52	SDIP QFP	64 64
				8K UVEPROM	512	52	Shrink cerdip	64
75P108B	High-end with 8-bit instruction; on-chip OTPROM	4.19	2.7 to 6.0	8K OTPROM	512	52	SDIP QFP	64 64
75112	High-end with 8-bit instruction	4.19	2.7 to 6.0	12K	512	52	SDIP QFP	64 64
75116	High-end with 8-bit instruction	4.19	2.7 to 6.0	16K	512	52	SDIP QFP	64 64
75P116	High-end with 8-bit instruction; on-chip OTPROM	4.19	4.5 to 5.5	16K OTPROM	512	52	SDIP QFP	64 64
75206	FIP controller/driver	4.19	2.7 to 6.0	6K	369	28	SDIP QFP	64 64
75208	FIP controller/driver	4.19	2.7 to 6.0	8K	497	28	SDIP QFP	64 64
75CG208	FIP controller/driver; piggyback EPROM	4.19	4.5 to 5.5	8K	512	28	Ceramic SDIP Ceramic QFP	64 64
75212A	FIP controller/driver	4.19	2.7 to 6.0	12K	512	28	SDIP QFP	64 64
75216A	FIP controller/driver; on-chip OTPROM	4.19	2.7 to 6.0	16K	512	28	SDIP QFP	64 64
75CG216A	FIP controller/driver; piggyback EPROM	4.19	4.5 to 5.5	16K	512	28	Ceramic SDIP Ceramic QFP	64 64
75P216A	FIP controller/driver; on-chip OTPROM	4.19	4.5 to 5.5	16K OTPROM	512	28	SDIP	84
75217	FIP controller/driver	4.19	2.7 to 6.0	24K	768	28	SDIP QFP	64 64
75P218	FIP controller/driver; on-chip OTPROM or UVEPROM	4.19	2.7 to 6.0	32K OTPROM	1024	28	SDIP QFP	64 64
				32K UVEPROM	1024	28	Ceramic LCC	64
75268	FIP controller/driver	4.19	2.7 to 6.0	8K	512	28	SDIP QFP	64 64
75304	LCD controller/driver	4.19	2.7 to 6.0	4K	512	32	QFP	80
75306	LCD controller/driver	4.19	2.7 to 6.0	6K	512	32	QFP	80
75308	LCD controller/driver	4.19	2.7 to 6.0	8K	512	32	QFP	80
75P308	LCD controller/driver; on-chip OTPROM or UVEPROM	4.19	4.75 to 5.25	8K OTPROM	512	32	QFP	80
				8K UVEPROM	512	32	Ceramic LCC	80
75312	LCD controller/driver	4.19	2.7 to 6.0	12K	512	32	QFP	80
75316	LCD controller/driver	4.19	2.7 to 6.0	16K	512	32	QFP	80
75P316	LCD controller/driver; on-chip OTPROM	4.19	4.75 to 5.25	16K OTPROM	512	32	QFP	80
75P316A	LCD controller/driver; on-chip OTPROM or UVEPROM	4.19	2.7 to 6.0	16K OTPROM	512	32	QFP	80
				16K UVEPROM	512	32	Ceramic LCC	80

4-Bit, Single-Chip CMOS Microcomputers; 75xxx Series (cont)

Device (μ PD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
75328	LCD controller/driver; A/D converter	4.19	2.7 to 6.0	8K	512	36	QFP	80
75P328	LCD controller/driver; A/D converter; on-chip OTPROM	4.19	4.5 to 5.5	8K OTPROM	512	36	QFP	80
75402A	Low-end	4.19	2.7 to 6.0	2K	64	22	DIP SDIP QFP	28 28 44
75P402	Low-end; on-chip OTPROM	4.19	4.5 to 5.5	2K OTPROM	64	22	DIP SDIP QFP	28 28 44
75512	High-end; A/D converter	4.19	2.7 to 6.0	12K	512	64	QFP	80
75516	High-end; A/D converter	4.19	2.7 to 6.0	16K	512	64	QFP	80
75P516	High-end; A/D converter; on-chip OTPROM or UVEPROM	4.19	4.75 to 5.5	16K OTPROM	512	64	QFP	80
				16K UVEPROM	512	64	Ceramic LCC	80

† Plastic unless ceramic (or cerdip) is specified.

8-Bit, Single-Chip CMOS Microcomputers; 78xx Series

Device (μ PD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
78C10/78C10A	CMOS; A/D converter	15	4.5 to 5.5	External	256	32	QUIP	64
							SDIP	64
							QFP	64
							PLCC	68
78C11/78C11A	CMOS; A/D converter	15	4.5 to 5.5	4K	256	40	QUIP	64
							SDIP	64
							QFP	64
							PLCC	68
78C12A	CMOS; A/D converter	15	4.5 to 5.5	8K	256	40	QUIP	64
							SDIP	64
							QFP	64
							PLCC	68
78C14/78C14A	CMOS; A/D converter	15	4.5 to 5.5	16K	256	40	QUIP	64
							SDIP	64
							QFP	64
							PLCC	68
78CP14	CMOS; A/D converter; on-chip OTPROM or UVEPROM	15	4.75 to 5.25	16K OTPROM	256	40	QUIP	64
				16K UVEPROM	256	40	SDIP	64
							QFP	64
							PLCC	68
							Ceramic QUIP Shrink cerdip	64
78CG14	CMOS; A/D converter; piggyback EPROM	15	4.5 to 5.5	4K, 8K, or 16K	256	40	Ceramic QUIP	64
78C17	CMOS; A/D converter	15	4.5 to 5.5	External	1024	40	QUIP	64
							SDIP	64
							QFP	64

8-Bit, Single-Chip CMOS Microcomputers; 78xx Series (cont)

Device (μ PD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
78C18	CMOS; A/D converter	15	4.5 to 5.5	32K	1024	40	QUIP SDIP QFP	64 64 64
78CP18	CMOS; A/D converter; on-chip OTPROM or UVEPROM	15	4.75 to 5.25	32K OTPROM	1024	40	QUIP SDIP QFP	64 64 64
				32K UVEPROM	1024	40	Ceramic LCC	64

† Plastic unless ceramic (or cerdip) is specified.

8-Bit, Single-Chip CMOS Microcomputers; 782xx (K2) Series

Device (μ PD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
78212	CMOS; A/D converter; advanced peripherals	12	4.5 to 5.5	8K	384	54	SDIP	64
							QUIP	64
							QFP	64
							QFP	74
							PLCC	68
78213	CMOS; A/D converter; advanced peripherals	12	4.5 to 5.5	External	512	54	SDIP	64
							QUIP	64
							QFP	64
							QFP	74
							PLCC	68
78214	CMOS; A/D converter; advanced peripherals	12	4.5 to 5.5	16K	512	54	SDIP	64
							QUIP	64
							QFP	64
							QFP	74
							PLCC	68
78P214	CMOS; A/D converter; advanced peripherals	12	4.5 to 5.5	16K OTPROM	512	54	SDIP	64
							QUIP	64
							QFP	64
							QFP	74
							PLCC	68
							16K UVEPROM	512
78220	CMOS; analog comparator; large I/O	12	4.5 to 5.5	External	640	71	PLCC	84
							QFP	94
78224	CMOS; analog comparator; large I/O	12	4.5 to 5.5	16K	640	71	PLCC	84
							QFP	94
78P224	CMOS; analog comparator; large I/O	12	4.5 to 5.5	16K OTPROM	640	71	PLCC	84
							QFP	94
78233	CMOS; real-time outputs; A/D and D/A converters	12	4.5 to 5.5	External	640	64	QFP	80
							QFP	94
							PLCC	84
78234	CMOS; real-time outputs; A/D and D/A converters	12	4.5 to 5.5	16K	640	64	QFP	80
							QFP	94
							PLCC	84
78237	CMOS; real-time outputs; A/D and D/A converters	12	4.5 to 5.5	External	1024	64	QFP	80
							QFP	94
							PLCC	84
78238	CMOS; real-time outputs; A/D and D/A converters	12	4.5 to 5.5	32K	1024	64	QFP	80
							QFP	94
							PLCC	84

8-Bit, Single-Chip CMOS Microcomputers; 782xx (K2) Series (cont)

Device (μ PD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
78P238	CMOS; real-time outputs; A/D and D/A converters	12	4.5 to 5.5	32K OTPROM	1024	64	QFP QFP PLCC	80 94 84
				32K UVEPROM	1024	64	Ceramic LCC	94
				External	512 512 EEPROM	54	SDIP QFP PLCC	64 64 68
78243	CMOS; A/D converter; EEPROM	12	4.5 to 5.5	External	512	54	SDIP	64
					512		QFP	64
					EEPROM		PLCC	68
78244	CMOS; A/D converter; EEPROM	12	4.5 to 5.5	16K	512	54	SDIP	64
					512		QFP	64
					EEPROM		PLCC	68

† Plastic unless ceramic (or cerdip) is specified.

8/16-Bit, Single-Chip CMOS Microcomputers; 783xx (K3) Series

Device (μ PD)	Features	Clock (MHz)	Supply Voltage (V)	ROM (X8)	RAM (X4)	I/O	Package †	Pins
78310A	Real-time motor control	12	4.5 to 5.5	External	256	48	SDIP	64
							QUIP	64
							QFP	64
							PLCC	68
78312A	Real-time motor control	12	4.5 to 5.5	8K	256	48	SDIP	64
							QUIP	64
							QFP	64
							PLCC	68
78P312A	Real-time motor control	12	4.5 to 5.5	8K UVEPROM	256	48	Shrink cerdip	64
							Ceramic QUIP	64
				8K OTPROM	256	48	SDIP	64
							QUIP	64
							QFP	64
							PLCC	68
78320	High-end; advanced analog and digital peripherals	16	4.5 to 5.5	External	640	55	QFP	74
							PLCC	68
78322	High-end; advanced analog and digital peripherals	16	4.5 to 5.5	16K	640	55	QFP PLCC	74 68
78P322	High-end; advanced analog and digital peripherals	16	4.5 to 5.5	16K OTPROM	640	55	QFP PLCC	74 68
				16K UVEPROM	640	55	Ceramic LCC	68
							Ceramic LCC	74
78330	CMOS; real-time pulse unit	16	4.5 to 5.5	External	768	70	QFP PLCC	94 84
78334	CMOS; real-time pulse unit	16	4.5 to 5.5	32K	768	70	QFP PLCC	94 84
78P334	CMOS; real-time pulse unit	16	4.5 to 5.5	32K OTPROM	768	70	QFP PLCC	94 84
				32K UVEPROM	768	70	Ceramic LCC	84