

68HC05 MICROCONTROLLERS (Continued)

All 68HC05 products have a standard operating voltage range from 3 V to 5.5 V unless noted in Comments.

All 68HC05 products have a standard operating temperature range from 0–70°C. Contact a Motorola Sales Office for availability of extended temperature versions.

Motorola Part Number	ROM (Bytes)	RAM (Bytes)	EEPROM (Bytes)	Timer	Serial	A/D	PWM	Display Drive	I/O	COP	Comments	Packages	Emulation Version	Documentation
XC68HC05K1	0.5K	32		MFT, RTI					10 i/o	✓	4 High Current Pins (8 mA sink) PEP (64 bits) Programmable Pulldowns (10 pins)	16 DIP – P 16 SOIC – DW	705K1	MC68HC05K1/D AN465/D
XC68HC05L1	4K	128		16-bit: (2IC, 2OC)		6 ch (8-bit)		64 Segment LCD: (3/4 x 12/16)	17 i/o 15 i 2 o			56 SDIP – B 64 QFP – FU	705L1	MC68HC05L1PR/H AN1058/D
XC68HC05L2	2K	96		16-bit: (1IC, 1OC) MFT, RTI	I ² C	1 ch (8-bit)		45 Segment LCD: (3 x 15)	13 i/o	✓	Programmable Pullups (13 pins)	42 SDIP – B	705L2	MC68HC05L2/D AN1058/D
XC68HC05L4	8K	224		2 x 16-bit: (1IC, 1OC) MFT, RTI				96 Segment LCD: (2/3/4 x 24)	24 i/o 8 i	✓	KBI (8 pins) Programmable Pullups (8 pins)	64 QFP – FU	705L4	MC68HC05L4/D
MC68HC05L5	8K	256		16-bit: (1IC, 1OC) RTI 8-bit: (1IC, 1OC)	SIOP			156 Segment LCD: (1–4 x 27–39)	14 i/o 10 i 15 o		KBI (8 pins), Dual Oscillators 8 High Current Pins (10 mA sink) Programmable Pullups (24 pins), Open Drain (31 pins), 2.2 V	80 QFP – FU	705L5	MC68HC05L5TS/D HC05L5TSAD/D
XC68HC05L6	6K	176		16-bit: (1IC, 1OC)	SPI			96 Segment LCD: (3/4 x 24)	24 i/o		Tone Generator	68 PLCC – FN	N/A	MC68HC05L6/D MC68HC05L6AD/D
MC68HC05L7	6K	176		16-bit: (1IC, 1OC) RTC	SCI			960 Segment LCD: (8/16 x 60)	15 i/o		Mux EBI (13-bit Address), 32 kHz PLL, KBI (8 pins), LVI Tone Generator	128 QFP – FT Die	N/A	MC68HC05L9D/H
MC68HC05L9	6K	176		16-bit: (1IC, 1OC) RTC	SCI			640 Segment LCD: (8/16 x 40)	27 i/o 2 i		Mux EBI (16-bit Address), 32 kHz PLL, KBI (8 pins), LVI Expand LCD to 3K Segments w/68HC68L9, Tone Generator	128 QFP – FT Die	N/A	MC68HC05L9D/H AN-HK-10
MC68HC05L10	13K	352		16-bit: (1IC, 1OC) RTC	SPI SCI			5K–20K Pixel LCD: (2 to 4 chip set)	28 i/o		Mux EBI w/MMU (20-bit Address) 4 Chip Selects, KBI (8 pins) Tone Generator/DTMF, 32 kHz PLL LCD Expansion w/MC141511	128 QFP – FT Die	N/A	DLH05L10/PR AN-HK-13A
XC68HC05L11	3K	448		16-bit: (1IC, 1OC) RTC	SPI SCI			Up to 40K Pixel LCD (3 Chip set)	38 i/o		Mux EBI w/MMU (23-bit Address) 4 Chip Selects, KBI (8 pins) Tone Generator/DTMF, 32 kHz PLL	100 QFP – FU	N/A	MC68HC05L11PR/H AN-HK-15
MC68HC05L12	8K	256		16-bit: (1IC, 1OC) RTI	SSPI			128 Segment LCD: (3 x 33 or 4 x 32)	15 i/o 8 i 1 o	✓	KBI (8 pins), Remote Control, Dual Oscillators, Buzzer Output, Programmable Pullups (16 pins) Open Drain (20 pins), 2.2 V	64 QFP – FU	705L13	Contact Sales Office
MC68HC05L16	16K	512		16-bit: (1IC, 1OC) RTI 8-bit: (1IC, 1OC)	SIOP			156 Segment LCD: (1–4 x 27–39)	16 i/o 8 i 15 o	✓	KBI (8 pins), Dual Oscillators 8 High Current Pins (10 mA sink) Programmable Pullups (24 pins) Open Drain (31 pins), 2.2 V Operation	80 QFP – FU	705L16	Contact Sales Office

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