

8-BIT MICROCONTROLLERS

TLCS-48 Series (CMOS/NMOS)

FEATURES

• Memory

(1) Max. 4K byte ROM and 256 byte RAM

• Additional Functions

(4) 8-bit interval timer/event counter

• Processor

(2) Software and pin compatible with Intel's 8048 series

(3) 96/97 instructions, min. 2.5/1.36 μ s at 6/11 MHz ocs.

NMOS

PART NUMBER	ROM (bit)	RAM (bit)	I/O Port (bit)	INST. CYCLE TIME (μ s)	SUPPLY VOLTAGE (V)	SUPPLY CURRENT MAX (mA)	OPERATING TEMP. ($^{\circ}$ C)	PACKAGE	COMPATIBLE COMPONENT
TMP8035AP	(4096 $\times$ 8 External)	64 $\times$ 8	(19)	1.36	4.5~5.5	90 <15>	0~70	40 Pin DIP	(8035)
TMP8035PI				2.5		145 <20>	-40~85	40 Pin DIP	(18035)
TMP8039AP				1.36		120 <20>	0~70	40 Pin DIP	(8039) (18039)
TMP8039PI-6	(4096 $\times$ 8 External)	128 $\times$ 8		2.5		170 <50>	-40~85	40 Pin DIP	

NOTES: < > : Standby current; () : In case of using external ROM

CMOS

PART NUMBER	ROM (bit)	RAM (bit)	I/O Port (bit)	INST. CYCLE TIME (μs)	SUPPLY VOLTAGE (V)	SUPPLY CURRENT MAX (ma)	OPERATING TEMP. (°c)	PACKAGE
TMP80C48AP-6 (TMP80C35AP-6)	1024 × 8	64 × 8	27 (19)	2.5	4.0~6.0	10 <0.01>	-40~80	40 Pin DIP
TMP80C48AP (TMP80C35AP)	4096 × 8			1.36	4.5~5.5	15 <0.01>	0~70	44 Pin PLCC
TMP80C48AT (TMP80C35AT)	External							
TMP80C49AF-6	2048 × 8	128 × 8		2.5	4.0~6.0	10	-40~85	44 Pin plastic flat package
TMP80C49AP-6 (TMP80C39AP-6)								40 Pin DIP
TMP80C49AF								44 Pin plastic flat package
TMP80C49AP (TMP80C39AP)	4096 × 8			1.36	4.5~6.5	15 <0.01>	0~70	40 Pin DIP
TMP80C49AT (TMP80C39AT)	External							44 Pin PLCC
TMP80C50AP-6 (TMP80C40AP-6)	4096 × 8			256 × 8	2.5	4.0~6.0	10 <0.01>	-40~85
TMP80C50AP (TMP80C40AP)								
TMP80C50AT (TMP80C40AT)	4096 × 8	1.36			4.5~5.5	15 <0.01>	0~70	44 Pin PLCC
	External							
TMP82C43P	I/O Expander				4.0~6.0	2	-40~85	24 Pin DIP

NOTES: < > : Standby current; P : Plastic Standard DIP, F : Plastic Flat Package, () : In case of using external ROM
T : Plastic Leaded Chip Carrier (PLCC)