

NMOS 4-BIT MICROCONTROLLER

TMP4700AC

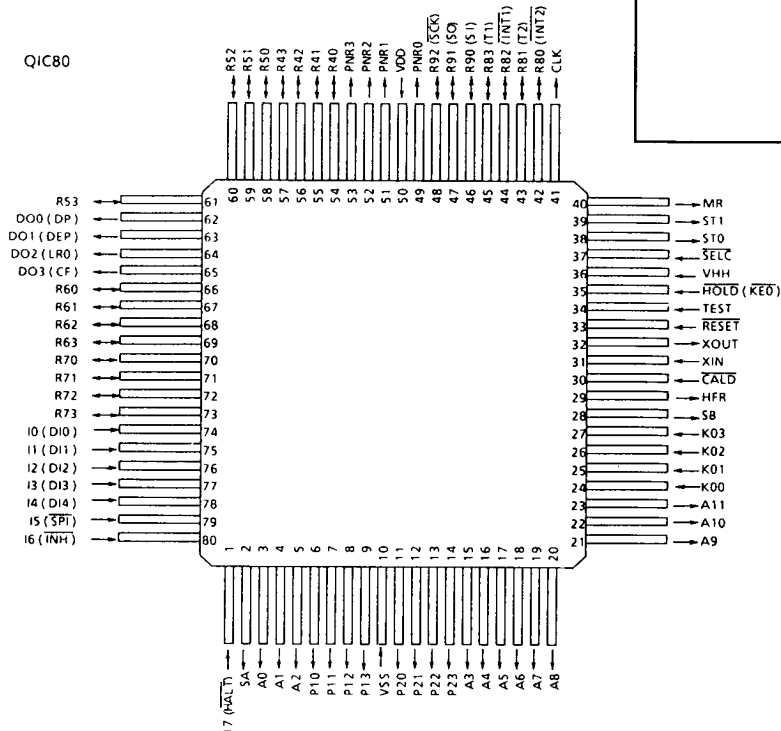
The 4700A is the system development evaluator chip used for developmental and operational check of the TLCS-47 application systems (programs).

PART No.	ROM	RAM	PACKAGE
TMP4700AC	4096 × 8-bit (external)	256 × 4-bit	QIC80

FEATURES

- ◆ 4-bit single chip microcomputer
- ◆ Instruction execution time : 1.9 μ s (at 4.2MHz)
- ◆ 90 basic instructions
- ◆ Subroutine nesting : 15 levels max.
- ◆ 6 interrupt sources (External : 2, Internal : 4)
- ◆ Interval Timer
- ◆ Two 12-bit Timer/Counters
- ◆ Serial Interface with 4-bit buffer.
- ◆ Memory holding function and Hold function

PIN ASSIGNMENT (TOP VIEW)



PIN FUNCTION

PIN NAME	Input/Output	FUNCTIONS	
K03 - K00	Input	4-bit input port	
P13 - P10	Output	4-bit output port with latch	
P23 - P20			
R43 - R40	I/O	4-bit I/O port with latch	
R53 - R50			
R62 - R60			
R73 - R70			
R83 (T1)	I/O (Input)	4-bit I/O port with latch	Timer/Counter 1 external input
R82 (INT1)			External interrupt 1 input
R81 (T2)			Timer/Counter 2 external input
R80 (INT2)			External interrupt 2 input
R92 (SCK)	I/O (I/O)	3-bit I/O port with latch	Serial clock I/O
R91 (SO)	I/O (Output)		Serial data output
R90 (SI)	I/O (Input)		Serial data input
XIN	Input	Resonator connecting pins	
XOUT	Output		
RESET	Input	Reset signal input	
HOLD (KE0)	Input (Input)	Hold request/release signal input	Sense input
TEST	Input	Test pin for out-going test. Be opened or fixed to low level.	
A11 - A0	Output	Program memory address output	
I7 (HALT)	Input (Input)	Program memory data input	Halt request signal input
I6 (INH)			Inhibit timer and interrupt signal input
I5 (SPI)			Port control signal input
I4 (DI4) - I0 (DI0)			Port data input
DO3 (CF)	Output (Output)	Port data output	Carry flag monitor output
DO2 (LR0)			Bit 0 of L register monitor output
DO1 (DEP)			Port control signal output
DO0 (DP)			
PNR3 - PNR0	Output	Port address output	
CLK		Strobe signal output	

PIN NAME	Input/Output	FUNCTIONS
ST, ST1	Output	State signal output
SA, SB		Cycle status signal output
MR		Master reset signal output
HFR		Hold operation monitor output
$\overline{\text{CALD}}$	Input	Data fetch cycle request signal input
$\overline{\text{SEL}}\overline{\text{C}}$		Clock division select signal input
VDD	Power Supply	+ 5V
VHH		+ 5V (Power supply for RAM)
VSS		0V (GND)