



PIC16F54/57

18/28-Pin FLASH Microcontroller Product Brief

High Performance RISC CPU

- Only 33 single-word instructions to learn
- All instructions are single cycle except for program branches which are two-cycle
- Two-level deep hardware stack
- Direct, Indirect and Relative Addressing modes for data and instructions
- Operating speed:
 - DC - 20 MHz clock speed
 - DC - 200 ns instruction cycle time
- On-chip FLASH program memory:
 - 512 x 12 on PIC16F54
 - 2048 x 12 on PIC16F57
- General Purpose Registers (SRAM):
 - 25 x 8 on PIC16F54
 - 72 x 8 on PIC16F57

Special Microcontroller Features

- Power-on Reset (POR)
- Device Reset Timer (DRT)
- Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation
- Programmable Code Protection
- Power saving SLEEP mode
- In-Circuit Serial Programmable™ (ICSP™) via 2 external pin connections.
- Selectable oscillator options:
 - RC: Low cost RC oscillator
 - XT: Standard crystal/resonator
 - HS: High speed crystal/resonator
 - LP: Power saving, low frequency crystal
- Packages:
 - 18-pin PDIP and SOIC for PIC16F54
 - 20-pin SSOP for PIC16F54
 - 28-pin PDIP, SOIC, and SSOP for PIC16F57

Low Power Features

- Operating Current:
 - 120 μ A @ 2V, 1 MHz, typical
 - 12 μ A @ 2V, 32 kHz, typical
- Standby Current:
 - 100 nA @ 2V, typical

Peripheral Features

- 12/20 I/O pins:
 - Individual Direction Control
 - High current source/sink for direct LED drive
- 8-bit real-time clock/counter (TMR0) with 8-bit programmable prescaler

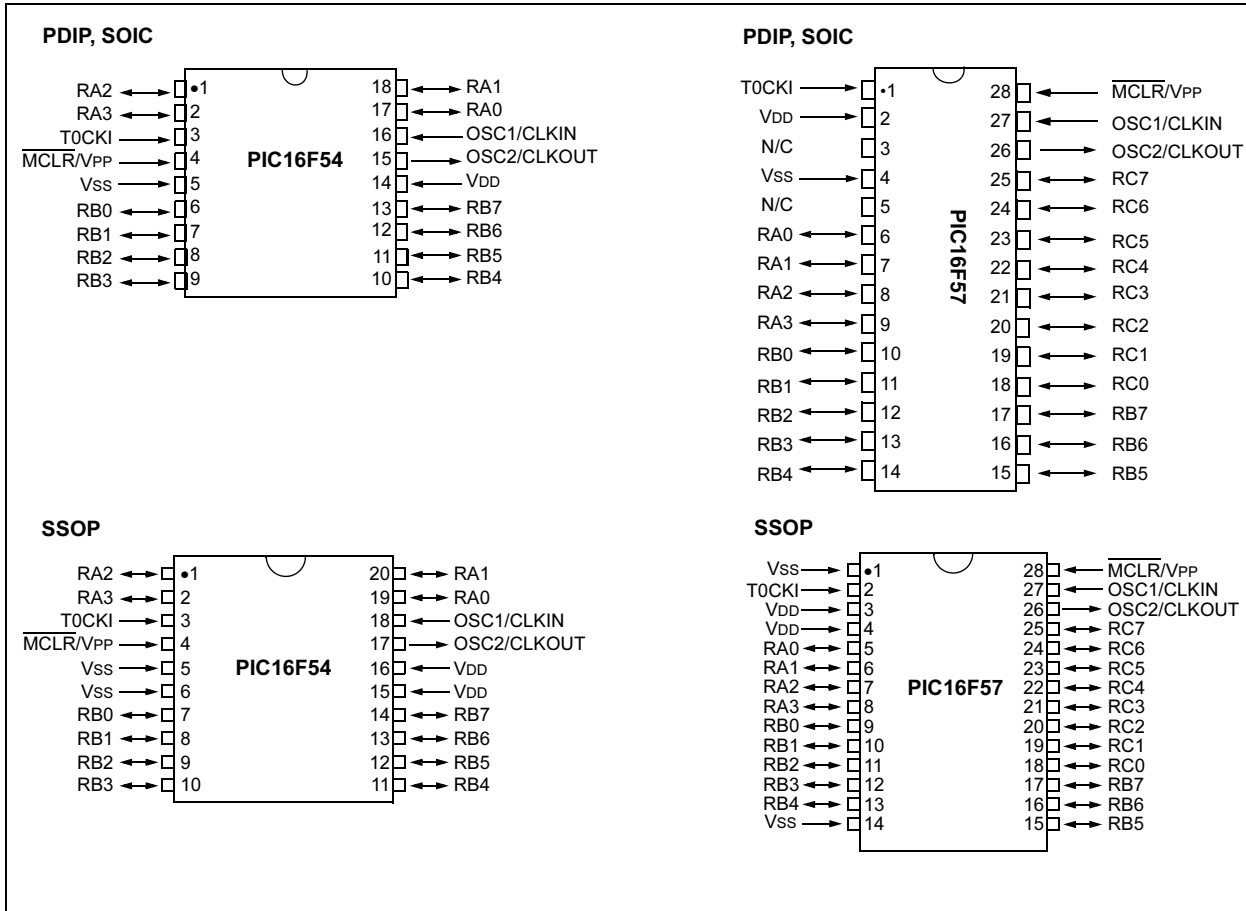
CMOS Technology

- Wide operating voltage range:
 - Industrial: 2.0V to 5.5V
 - Extended: 3.0V to 5.5V
- Wide temperature range:
 - Industrial: -40°C to 85°C
 - Extended: -40°C to 125°C
- High endurance FLASH:
 - 100K write/erase cycles
 - > 40 year retention

Device	Program Memory	Data Memory	I/O	Timers 8-bit
	FLASH (words)	SRAM (bytes)		
PIC16F54	512	25	12	1
PIC16F57	2048	72	20	1

PIC16F54/57

Pin Diagrams



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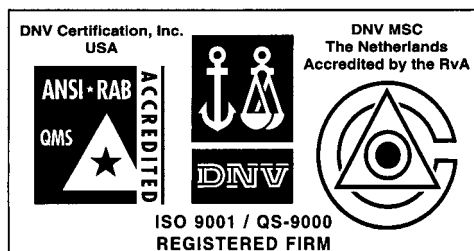
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05/30/03

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