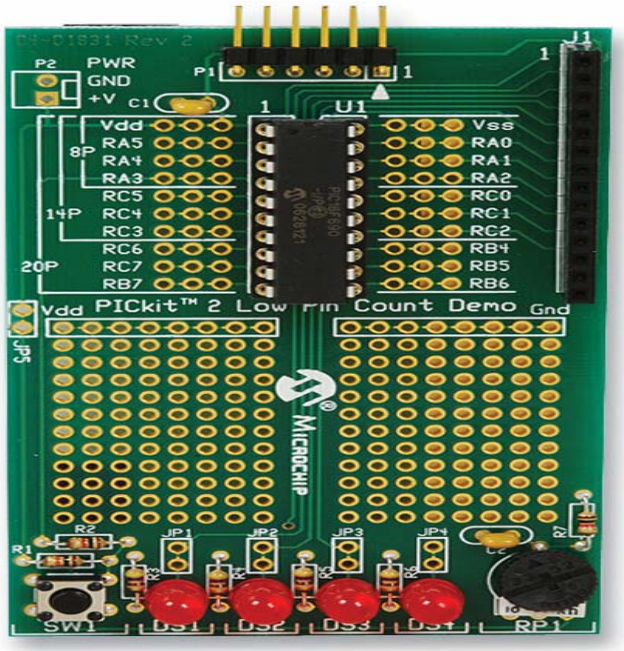
Microchip - DM164120-4 - PICkit 18-Pin Demo Board

Product Overview:



PIC16F648A is a powerful (200 nanosecond instruction execution) yet easy-to-program (only 35 single word instructions) CMOS FLASH-based 8-bit microcontroller packs Microchip's powerful PIC® architecture into an 18-pin package and is upwards compatible with the PIC16F628, PIC16C62XA, PIC16C5X and PIC12CXXX devices. The PIC16F648A features 4MHz internal oscillator, 256 bytes of EEPROM data memory, a capture/compare/PWM, a USART, 2 Comparators and a programmable voltage reference that make it ideal for analog/integrated level applications in automotive, industrial, appliances and consumer applications.

DM164120-4,18-Pin Demo Board with PIC16F648A includes 4 LEDs, a potentiometer for ADC, a pushbutton, a prototyping area, and a 6-pin connector for PICkit 2. It also includes 2 extra bare PCB boards for your own design.

Kit Contents:

- 18-Pin Demo Board with PIC16F648A
- 4 LEDs
- A potentiometer for ADC
- A pushbutton
- A prototyping area
- A 6-pin connector for PICkit 2
- Includes 2 extra bare PCB boards for your own design.

Kit Features:

- 8-pin Demo Board with PIC16F648A.
- Internal and external oscillator options:
    - Precision internal 4 MHz oscillator factory calibrated to ±1%

  - Low-power internal 48 kHz oscillator
  - External Oscillator support for crystals and resonators
- Power-saving Sleep mode
- Programmable weak pull-ups on PORTB
- Multiplexed Master Clear/Input-pin
- Watchdog Timer with independent oscillator for reliable operation
- Low-voltage programming
- In-Circuit Serial Programming™ (via two pins)
- Programmable code protection
- Brown-out Reset
- Power-on Reset
- Power-up Timer and Oscillator Start-up Timer
- Wide operating voltage range (2.0-5.5V)
- Industrial and extended temperature range
- High-Endurance Flash/EEPROM cell:
  - 100,000 write Flash endurance
  - 1,000,000 write EEPROM endurance
  - 40 year data retention

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
DM164120-4	Microchip	1676247	07P9070

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
PIC16F648A-I/P	Microchip	8BIT FLASH MCU, 16F648, DIP1	PIC16F648	9760490
PG164120	Microchip	PROGRAMMER, PICKIT 2	PICKIT	9847170

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
DV164121+TEFLCST3	Microchip	DEBUG KIT, EXPRESS, PICKIT2	PIC12F5xx, PIC12F6xx, PIC16F5xx	1711385	15R0879

DV164122	Microchip	PICkit Serial Analyzer	PIC16F886	1439719	26M9206
DV164121	Microchip	DEBUG KIT, EXPRESS, PICKIT2	PIC12F5xx, PIC12F6xx, PIC16F5xx	1340278	16M6058
PG164120	Microchip	PROGRAMMER, PICKIT 2	PICKIT	9847170	51M8937
DV164035	Microchip	DV164035 - KIT, EVALUATION, ICD3	PICxx MCUs/ PICxx DSCs	1664878	19P0223
DV164131	Microchip	PICkit 3 Debug Express	Flash based PIC MCUs	1686530	50P9695
DM164120-1	Microchip	DEVELOPMENT KIT, LOW PIN COUNT	PIC16F690	1439837	69K0012
DM164120-3	Microchip	KIT, PICKIT 2 28-PIN DEMO BOARD	PICkit 2 28-Pin Demo Board	1555681	39M8069

Document List:

Datasheets:

Part Number	Description	Size
PIC16F648A	PIC16F627A/628A/648A FLASH-Based 8-Bit CMOS Data Sheet	2996KB
PICDEM	PICDEM Lab Development Kit	2314KB
PICDEM flow code	PICDEM Lab Flow code Companion Guide	4596KB
PICkit	Low Cost Development Tools Guide	1313KB
PICkit	Low Pin Count User's Guide	452KB
PIC16F887	PIC16F882/883/884/886/887 Data Sheet	5.16MB
PICkit 2 kit demo info	PICkit 2 64_80-Pin PIC18J Demo Board Info	321KB
PICkit 2 microcontroller programmer user guide	PICkit 2 Microcontroller Programmer User's Guide	2126KB

Application Notes:

File Name	Size
28-Pin Demo Board User's Guide	291KB

44-Pin Demo Board User's Guide	519KB
AN1066 - MiWi Wireless Networking Protocol Stack	634KB
AN1072 - Measuring VDD Using the 0.6V Reference	280KB
Measuring VDD Using the 0.6V Reference	15KB
AN1101 - Introduction to Capacitive Sensing	442KB
AN1102 - Layout and Physical Design Guidelines for Capacitive Sensing	666KB
AN1103 - Software Handling for Capacitive Sensing	513KB
PICDEM Lab Development Kit User's Guide (HI-TECH version)	1671KB
AN950 - Power Management for PIC18 USB Microcontrollers with nanoWatt Technology	259KB

Hardware & Software:

File Name	Size
Header Specification	785KB
PICkit 2 64/80-Pin PIC18J Demo Files	2KB
PICkit 2 64/80-Pin PIC18J Demo Schematic	173KB
PICDEM Lab Development Kit Lab Directory and Solutions (Flow code version)	244KB

Others Resources:

File Name	Size
8-bit Microcontroller Product Selector Guide	2637KB
PIC18F Development Tools Product Overview	97KB
PICkit 2 Debug Express Product Overview	511KB
PICkit 2 Logic Tool User Guide	489KB
PICkit 2 Programmer-To-Go User Guide	491KB
PICkit 2 Starter Kit Product Overview	75KB