



Microchip - DV164121+TEFLCST3 Debugger Kit

Product Overview:

PICkit™ 2 Debug Express allows in-circuit debugging on selected PIC® microcontrollers. In-circuit debugging allows the designer to run, halt and single step the program while the PIC microcontroller is embedded in the hardware. Once halted, the file registers may be examined and modified. This greatly assists the designer in debugging the firmware and hardware together.

The PICkit 2 Debug Express is a low-cost development kit with an easy to use interface for debug as well as programming. It comes complete with a development board that contains Microchip's 44-pin PIC16F887 Flash microcontroller. This starter kit is designed to help developers get up to speed quickly using PIC® microcontrollers and



provides everything needed to program, evaluate and develop applications. Instructions are provided in a series of twelve lessons that cover I/O, Interrupts, A/D Converters, Data Tables and Timers with an additional lesson covering debugging features. All source code files for the lessons are furnished.

Kit Content:

- PICkit 2 Device Programmer
- 44-pin Demo Board with PIC16F887 MCU
- PICkit CD ROM
- MPLAB IDE (Integrated Development Environment) CD ROM
- USB Mini Interface Cable

Key Features:

- 44-pin Demo Board with PIC16F887 Mid-Range PIC microcontroller
- Easy to use Windows® programming of select Flash based PIC microcontrollers
- Twelve sequential lessons written in Assembly demonstrate how to use Microchip's 20-pin Flash family of microcontrollers



- Lesson included for the Debug Features (PIC16F887)
- Technical documentation CD including
 - PICkit 2 User's Guide
 - 44-Pin Demo Board User's Guide
 - Tips 'n Tricks Booklets
 - selected Application Notes
- FREE! Microchip's MPLAB IDE software for a complete code development environment
- FREE! HI-TECH PICC™ LITE C Compiler (contained on the MPLAB CD)
- FREE! CCS PCM Mid-Range C Compiler demo version

Ordering Information:

Products:

| Part Number | Manufacturer | Farnell P/N | Newark P/N |
|-------------------|--------------|-------------|------------|
| DV164121+TEFLCST3 | Microchip | 1711385 | 15R0879 |

Associated Products:

| Part Number | Manufacturer | Description | Support Device | Farnell P/N | Newark P/N |
|----------------|--------------|----------------------------------|-------------------|-------------|------------|
| DM164120-2 | Microchip | DEMO KIT, 44-PIN, PICKIT2 | PIC16F | 1294834 | 16M5773 |
| PIC16F887-E/PT | Microchip | MCU, 8-BIT, 14K FLASH, TQFP44 | PIC16F | 1579592 | 08N6580 |

Similar Products:

| Part Number | Manufacturer | Description | Support Device | Farnell P/N | Newark P/N |
|-------------|--------------|------------------------|----------------|----------------|---------------|
| DV164122 | Microchip | PICkit Serial Analyzer | PIC16F886 | 1439719 | 26M9206 |
| | | DEBUG KIT, | PIC12F5xx, | | |
| DV164121 | Microchip | EXPRESS, PICKIT2 | PIC12F6xx, | 1340278 | 16M6058 |
| | | | PIC16F5xx | | |
| PG164120 | Microchip | PROGRAMMER, | PICKIT | 9847170 | 51M8937 |
| F G 104120 | Microcrip | PICKIT 2 | FIORIT | 3047170 | 31110937 |
| DV164035 | Microchip | DV164035 - KIT, | PICxx MCUs/ | 1664878 | 19P0223 |
| DV 104035 | Microcrip | EVALUATION, ICD3 | PICxx DSCs | 1004070 | 1950223 |



| 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 |
| DM164120-4 | Microchip | KIT, PICKIT 2 18P DEMO BOARD | PICkit 2 18-Pin Demo Board | 1676247 | 07P9070 |

Document List:

Datasheets:

| Part Number | Description | Size |
|--|--|--------|
| PICDEM | PICDEM Lab Development Kit | 2314KB |
| PICDEM flow code | PICDEM Lab Flowcode 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 (Flowcode 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 |

