



## Microchip - DV164126 - DV164126 Development Kit

### **Product Overview:**

The Low Pin Count USB Development Kit provides an easy, low cost way to evaluate the functionality of Microchip's PIC18F14K50 and PIC18F13K50 20-pin USB microcontrollers. The all-inclusive kit contains the hardware, software, and code examples necessary to bring your next USB design from concept to first prototype. Created with the USB novice in mind, the kit includes **"Getting Started with Microchip's Low Pin Count USB Solutions"**, a self-directed course and lab material designed to ease the learning curve associated with adding USB connectivity to embedded systems.



### **Kit Content:**

The Low Pin Count USB Development Kit contains the following:

- fully populated Low Pin Count USB Development Board
- unpopulated spare development board
- PIC18F14K50 ICD populated expansion header
- CD containing the user guide, course materials and product documentation.
- PICkit™ 2 Debugger/Programmer with cable.

### **Key Features:**

The Low Pin Count USB Development Kit provides an easy, low cost way to evaluate the functionality of Microchip's PIC18F14K50 and PIC18F13K50 20-pin USB microcontrollers.

#### **Special Microcontroller Features:**

- Full 5.5V Operation – PIC18F1XK50
- 1.8V-3.6V Operation – PIC18LF1XK50
- Self-programmable under Software Control
- Programmable Brown-out Reset (BOR)
  - With software enable option

- Extended Watchdog Timer (WDT)
  - Programmable period from 4ms to 131s
- Single-supply 3V In-Circuit Serial Programming (ICSP) via two pins

## Ordering Information:

## Products:

| Part Number | Manufacturer | Farnell P/N | Newark P/N |
|-------------|--------------|-------------|------------|
| DV164126    | Microchip    | 1687477     | 45P4716    |

## Associated Products:

| Part Number     | Manufacturer      | Description                       | Support Device       | Farnell P/N | Newark P/N |
|-----------------|-------------------|-----------------------------------|----------------------|-------------|------------|
| PIC18F14K50-I/P | Microchip         | 8-Bit Microcontroller IC          | PIC18F14K50          | 1648501     | 77M3103    |
| MAX3232CDBE4    | Texas Instruments | DRIVER/RECEIVER, RS-232, SSOP16   | MAX3232              | 1287435     | 26M0603    |
| 500075-1517     | Molex             | SOCKET, USB, MINI-B, T/HOLE, VERT | USB mini-B connector | 1125349     | 93K4120    |
| 74960-2028      | Molex             | Wire-To-Board Connector           | RS-232 Connector     | NA          | 82K9063    |

## Similar Products:

| Part Number     | Manufacturer | Description                        | Support Device           | Farnell P/N | Newark P/N |
|-----------------|--------------|------------------------------------|--------------------------|-------------|------------|
| DM164127        | Microchip    | DEV KIT, USB, W/ PICKIT 2          | PIC18F14K50, PIC18F13K50 | 1690680     | 45P4598    |
| PIC18F13K50-I/P | Microchip    | MCU, 8-BIT, 8K FLASH, USB, DIP20   | PIC18F13K50              | 1697073     | 77M3098    |
| AC244023        | Microchip    | ADAPTER, PROC EXT PAK, PIC18F1XK50 | PIC18F13K50, PIC18F14K50 | 1699834     | 04R7529    |
| PG164120        | Microchip    | PROGRAMMER, PICKIT 2               | PICKIT                   | 9847170     | 51M8937    |

|          |           |                                 |                  |         |         |
|----------|-----------|---------------------------------|------------------|---------|---------|
| AC164131 | Microchip | USB PICtail Plus Daughter Board | Explorer 16      | 1558603 | 88M9288 |
| DM320001 | Microchip | STARTER KIT, PIC32              | Microchip 32-bit | 1523317 | 71M0037 |

## Document List:

## Datasheets:

| Part Number              | Description                                                                                  | Size   |
|--------------------------|----------------------------------------------------------------------------------------------|--------|
| PIC18F13K50/14K50        | <a href="#">PIC18F13K50/14K50 20-Pin USB Flash Microcontrollers with nanoWatt Technology</a> | 6421KB |
| PIC18F13K50/PIC18LF1XK50 | <a href="#">PIC18F1XK50/PIC18LF1XK50 Flash Memory Programming</a>                            | 501KB  |
|                          | <a href="#">PIC18F2450/4450 Data Sheet</a>                                                   | 5.54MB |

## Application Notes:

| File Name                                                                                                               | Size  |
|-------------------------------------------------------------------------------------------------------------------------|-------|
| <a href="#">AN1204 - Microchip MiWi P2P Wireless Protocol</a>                                                           | 370KB |
| <a href="#">AN1229 - Class B Safety Software Library for PIC MCUs and dsPIC DSCs</a>                                    | 398KB |
| <a href="#">AN1267 - nanoWatt &amp; nanoWatt XLP(TM) Technologies: An Introduction to Microchip's Low Power devices</a> | 259KB |
| <a href="#">AN1140 - USB Embedded Host Stack</a>                                                                        | 467KB |
| <a href="#">AN1189 - Implementing a Mass Storage Device Using the Microchip USB Device Firmware Framework</a>           | 168KB |
| <a href="#">AN1212 - Using USB Keyboard with an Embedded Host</a>                                                       | 485KB |
| <a href="#">AN950 - Power Management for PIC18 USB Microcontrollers with nanoWatt Technology</a>                        | 259KB |

## Hardware & Software:

| File Name                                                           | Size   |
|---------------------------------------------------------------------|--------|
| <a href="#">Low Pin-Count USB Development Kit Lab Folders</a>       | 155KB  |
| <a href="#">Low Pin-Count USB Development Kit Project Labs</a>      | 155KB  |
| <a href="#">AN1229 Source Code</a>                                  | 342KB  |
| <a href="#">PIC32 USB Device/Embedded Host Software Stack v1.04</a> | 4924KB |

## Others Resources:

| File Name                                                    | Size    |
|--------------------------------------------------------------|---------|
| <a href="#">8-bit Microcontroller Product Selector Guide</a> | 2637KB  |
| <a href="#">Solutions for Medical Applications</a>           | 1.52MB  |
| <a href="#">Microchip Application Libraries</a>              | 76921KB |