

# PA17C42-QD(-03 or -16) Data Sheet

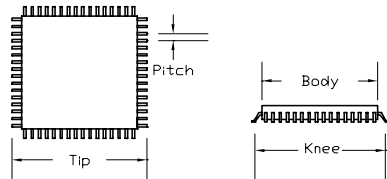
44 pin PQFP or TQFP socket/40 pin DIP 0.6" plug

## Supported Device/Footprints

Using this adapter several Microchip devices in a 44 pin QFP package can be programmed on 40 pin DIP programmers.

| Device    |               |         | Footprint |        |
|-----------|---------------|---------|-----------|--------|
| Mfgr      | Device        | Package | Device    | Plug   |
| Microchip | PIC17C42, 42A | 44 QFP  | Same      | 40 DIP |
| "         | PIC17C43      | "       | "         | "      |
| "         | PIC17C44      | "       | "         | "      |

The QFP socket accepts packages with the dimensions listed below:



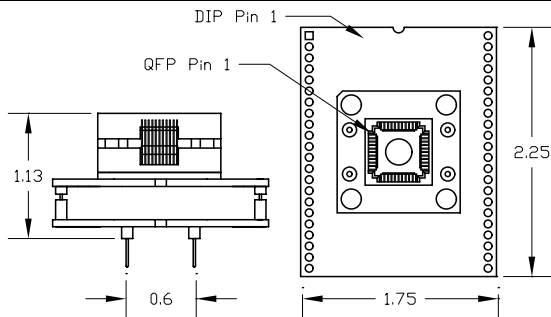
| Socket          | Body        | Knee                     | Tip (lead span)          | Pitch  |
|-----------------|-------------|--------------------------|--------------------------|--------|
| 44QF-03<br>PQFP | 10.0 mm typ | 11 mm typ<br>11.3 mm max | 12 mm typ<br>12.8 mm max | 0.8 mm |
| 44QF-16<br>PQFP | 10.0 mm typ | 11.6 mm typ              | 13.2 mm typ              | 0.8 mm |

## Which adapter is correct for your package

There are several 44QFP packages. Some devices are available in more than one 44QFP package. Lookup the lead span for the package you will be using. Find the matching socket in the table above. Find the adapter that includes that socket in the Adapter Construction section.

Logical Systems maintains a device to adapter cross reference in our office and on our web site. Contact us or visit our web site to look up a manufacturer and device or package code.

## Adapter Dimensions



PA17C42-QD-03

## Adapter Construction

The adapter is made up of 3 sub-assemblies. They assemble via connectors making the adapter modular. This way the sub-assemblies can be replaced easily.

The following chart shows the various socket and board part numbers that make up these adapters.

| Adapter       | Socket  | Top Board | Bottom Board |
|---------------|---------|-----------|--------------|
| PA17C42-QD-03 | 44QF-03 | 44QFP-03  | 44-40-P42    |
| PA17C42-QD-16 | 44QF-16 | 44QFP-16  | 44-40-P42    |

When disassembling the adapter take care not to bend the pins. When reassembling the adapter note the pin 1 indicators to align the parts correctly.

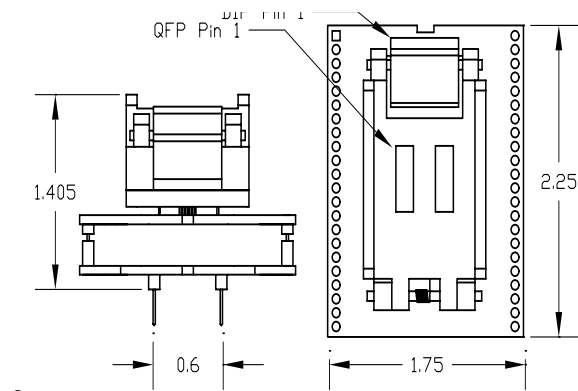
## Test Sockets

| LSC #   | Style        | Mfgr/Pn              |
|---------|--------------|----------------------|
| 44QF-03 | Open Top ZIF | Enplas OTQ-44-0.8-03 |
| 44QF-16 | Lidded ZIF   | Enplas FPQ-44-0.8-16 |

## Adapter Wiring

The following chart shows the connections from the QFP device to the adapter's DIP plug.

| QFP | SIGNAL   | DIP | DIP | SIGNAL      | QFP |
|-----|----------|-----|-----|-------------|-----|
| 1   | TEST     | 27  | 26  | RA0/INT     | 44  |
| 2   | RE2/WR   | 28  | 25  | RA1/RT      | 43  |
| 3   | RE1/OE   | 29  | 24  | RA2         | 42  |
| 4   | RE0/ALE  | 30  | 23  | RA3         | 41  |
| 5   | Vss      | 31  | 22  | RA4/RX/DT   | 40  |
| 6   | Vss      | 31  | 21  | RA5/TX/CK   | 39  |
| 7   | MCLR/Vpp | 32  | 20  | OSC2/CLKOUT | 38  |
| 8   | RD7/AD15 | 33  | 19  | OSC1        | 37  |
| 9   | RD6/AD14 | 34  | 18  | RB7         | 36  |
| 10  | RD5/AD13 | 35  | 17  | RB6         | 35  |
| 11  | RD4/AD12 | 36  | 16  | RB5/TCLK3   | 34  |
| 12  | RD3/AD11 | 37  | 15  | RB4/TCLK12  | 33  |
| 13  | RD2/AD10 | 38  | 14  | RB3/PWM2    | 32  |
| 14  | RD1/AD9  | 39  | 13  | RB2/PWM1    | 31  |
| 15  | RD0/AD8  | 40  | 12  | RB1/CAP2    | 30  |
| 16  | Vdd      | 1   | 11  | RB0/CAP1    | 29  |
| 17  | Vdd      | 1   | 10  | Vss         | 28  |
| 18  | -        | NC  | 10  | Vss         | 27  |
| 19  | RC0/AD0  | 2   | 9   | RC7/AD7     | 26  |
| 20  | RC1/AD1  | 3   | 8   | RC6/AD6     | 25  |
| 21  | RC2/AD2  | 4   | 7   | RC5/AD5     | 24  |
| 22  | RC3/AD3  | 5   | 6   | RC4/AD4     | 23  |



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