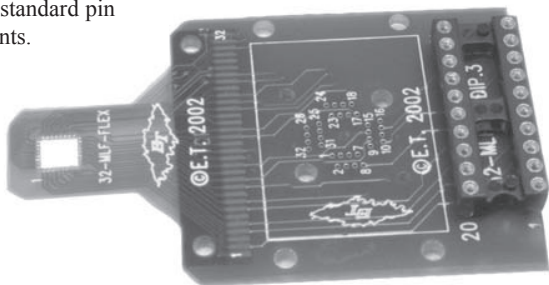




EMULATOR ADAPTERS - MLF/QFN

EMULATOR TOOLS & ADAPTERS

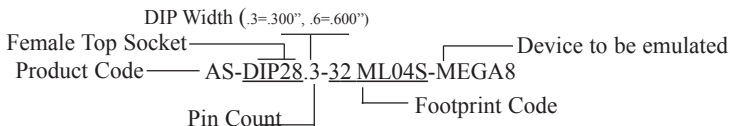
Easily connects to an in-circuit emulator via standard pin counts.



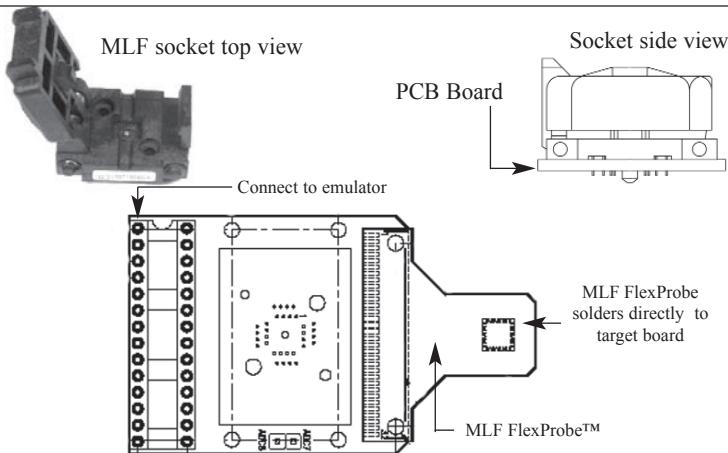
This emulator can quickly be transformed for programming and logic analysis.

EMULATE. ANALYZE. PROGRAM.

Ordering Information Example

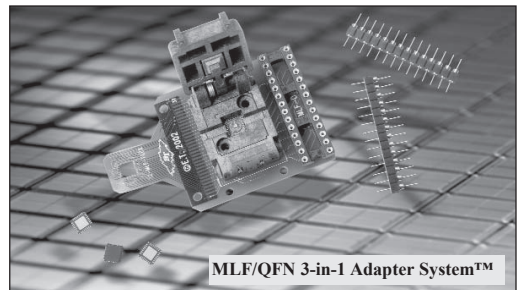


For a complete list of adapter specifications, pricing and delivery information, please see: Web Link: www.1800adapter.com/060



MLF/QFN 3-in-1 Adapter System™

The QFN/MLF 3-in-1 Adapter System™ ensures quick and easy configuring and interfacing to an in-circuit emulator, device programmer, logic analyzer or oscilloscope. The first of its kind, this 3-in-1 system provides the solution for test and design engineers needing QFN (Quad Flat Non-leaded) or MLF (Micro Lead Frame) signal access. This system supports the ATMEL® ATtiny26, ATtiny28, ATmega8, ATmega16 and ATmega32 8-bit AVR® Microcontrollers.



FEATURES & BENEFITS

- Reduces cost of ownership by 50-66% by eliminating the need for three separate adapters
- Change chip packages rapidly
- Flexible target interconnect minimizes physical strain on target pads
- Excellent for in-circuit or out of circuit programming
- Monitor signals - Logic Analysis
- Quick interface In-Circuit Emulator
- Compact design ensures signal integrity

MLF/QFN LOGIC ANALYZER ADAPTER (ONLY) PART NUMBERS

Logic Analyzer Adapter Only

| Top DIP Pin Count | Top DIP Width (Inches) | Bottom SMT Pin Count | Bottom SMT Lead Pitch (mm) | Body Size | Footprint Code | ET Part # | Drawing # |
|-------------------|------------------------|----------------------|----------------------------|-----------|----------------|------------------------------|-----------|
| 28 | 0.300 | 32 | 0.50 | 5X5 | 32-ML04 | AS-DIP28.3-32ML04S-MEGA8 | F6658 |
| 20 | 0.300 | 32 | 0.50 | 5X5 | 32-ML04 | AS-DIP20.3-32ML04S-TINY26 | F6659 |
| 40 | 0.600 | 44 | 0.50 | 7X7 | 44-ML05 | AS-DIP40.6-44ML05S-MEGA16/32 | F6660 |
| 40 | 0.600 | 44 | 0.50 | 7X7 | 44-ML05 | AS-DIP40.6-44ML05S-MEGA162 | F6661 |

MLF/QFN 3-IN-1 ADAPTER SYSTEM PART NUMBERS

Complete 3-in-1 Adapter System

| Pin Count | Pin Map | SMT Lead Pitch (mm) | Body Size | Footprint Code | ET Part # | Drawing # |
|-----------|-----------------|---------------------|-----------|----------------|------------------------------|-----------|
| 32 | ATMEL MEGA 8 | 0.50 | 5X5 | 32-ML04 | BCP-032-ML04Z-MEGA8-3IN1 | F6730 |
| 32 | ATMEL TINY 26 | 0.50 | 5X5 | 32-ML04 | BCP-032-ML04Z-TINY26-3IN1 | F6727 |
| 44 | MEGA16/32, 8535 | 0.50 | 7X7 | 44-ML05 | BCP-044-ML05Z-MEGA16/32-3IN1 | F6728 |
| 44 | MEGA 162, 8515 | 0.50 | 7X7 | 44-ML05 | BCP-044-ML05Z-MEGA162-3IN1 | F6729 |

- Logic Analyzer Adapter
- Program Adapter
- Emulator Adapter