

Comparison in-circuit emulators for PICmicro®

| | ICE 2000 Microchip | ICEPIC2 RF Solutions | PICE-MC Phyton |
|--|--|---------------------------------|---|
| PICmicro MCU supported | PIC 12/16/17/18 families | PIC 12/16/17 families | PIC 12/16/17/18 families |
| Max. Frequency, MHz | 40 | 33 | 40 |
| Program memory, K byte | 128K | 16K | 128K (up to 2M) |
| Memory mapping capability | Only one window in external memory with 256 words resolution | No | Mapping between internal and external memory with one word or 256 bytes resolution |
| On-the-fly access to main resources | No | No | Yes, to internal program memory, breakpoints, tracer, timer |
| Shadow RAM for external and internal memory | No | No | Yes |
| Hardware breakpoints at the code memory | No | Yes | 128K (up to 2M) |
| Hardware breakpoints at the code memory in ROM | 3 | Yes | 128K (up to 2M) |
| Hardware breakpoints on access to the external data memory | No | No | 256K (up to 4M) |
| Hardware breakpoints on access to internal data mem. | No | No | 8K |
| Complex breakpoints/triggers | 3 | No | 4 |
| Real-time timer | Yes | Yes | Yes, 48 bit |
| Programmable clock | Yes, 32 KHz...40 MHz | No | Yes, 5KHz...40 MHz |
| Trace capability | 32K frames x 128 bits | 8K frames x 16 bits | 16K frames x 128 bits |
| Voltage, V | 2...5.5 | 5.0 | 2...5.5 settable with 20mV resolution or self-adjustable to target |
| PC hosted via | Printer port, LPT | RS-232 serial | Serial, opto-isolated interface RS-232C, 115K baud, USB in 2003 |
| Design and dimensions | Box, external POD and adapter | Box, external POD and adapter | Palm size header that plugs directly to a target socket, 3"x2"x1" |
| Source-level debugging | MPLAB, Hi-Tech, others | MPLAB, Hi-Tech, others | MPLAB, Hi-Tech, IAR, CCS compilers, Phyton PASM-MC |
| IDE and project support | MPLAB | MPLAB | MPLAB, Hi-Tech, Phyton |
| Price, USD for full set | About \$2200 | About \$1000 | \$1600...\$1900 |