

J-32 Debug Probe



J-32 Debug Probe is a JTAG emulator that supports all of Microchip's 32-bit MCU and MPU offerings, including Thumb mode. It supports download speeds up to 480 Mbit/s and maximum JTAG speeds up to 15 MHz. It also supports Serial Debug Wire (SWD), Microchip's In-Circuit Serial Programming (ICSP) and ETB Trace.

In-Circuit Emulators and Debuggers

| Feature | MPLAB® ICD 4 | MPLAB PICKIT™ 4 | MPLAB Snap | Atmel ICE | J-32 Debug Probe | Power Debugger |
|-----------------------------------|----------------------------|------------------------------|-------------------------------|------------------|------------------------------|-----------------------|
| Products Supported | PIC®, SAM MCU, dsPIC® DSC* | PIC, AVR, SAM MCU, dsPIC DSC | PIC, AVR, SAM MCU, dsPIC DSC* | AVR MCU, SAM MCU | 32-bit PIC, SAM MCU, SAM MPU | AVR MCU, SAM MCU |
| IDE Supported | MPLAB X IDE | MPLAB X IDE | MPLAB X IDE | Studio | MPLAB X IDE | Studio |
| USB 2.0 Speed | High | High | High | High | High | High |
| USB Driver | Microchip | Microchip | Microchip | HID + Microchip | Segger | HID + Microchip |
| USB Powered | Yes | Yes | Yes | Yes | Yes | Yes |
| Programmable Vpp | Yes | Yes | No | No | No | No |
| Power to Target | Yes - 1A | Yes - 50 mA | No | No | No | No |
| Programmable Vdd | Yes | Yes | No | No | Yes | No |
| Vdd Drain from Target | < 1 mA | < 1 mA | < 1 mA | < 1 mA | < 25 mA | < 1 mA |
| Over Voltage/Current Protection | Yes, HW | Yes, SW | OV only | Yes, HW | Yes | Yes, HW |
| Breakpoints | Complex | Simple | Simple | Target Dependent | Yes | Target Dependent |
| Software Breakpoints | Yes | Yes | Yes | Yes | Yes | Yes |
| Memory for target image storage | No | Micro SD Card | No | No | No | No |
| Serialized USB | Yes | Yes | Yes | Yes | Yes | Yes |
| Trace, Native | No | No | No | Coresight, SWO | Coresight, SWO | Coresight, SWO |
| Trace, Other (SPI, PORT, Inst) | No | No | No | SPI, UART | No | SPI, UART, I²C, USART |
| Data Capture | No | No | No | No | Target Dependent | No |
| Logic/Probe Triggers | No | No | No | No | No | 4 Channels |
| High-Speed Performance PAK (LVDS) | No | No | No | No | No | No |
| Production Programmer | Yes | Yes | No | No | Yes | No |
| Power Measurement/Profiling | No | No | No | No | No | 2 Channels |
| Part Number | DV164045 | PG164140 | PG164100 | ATATMEL-ICE | DV164232 | ATPOWERDEBUGGER |

*Full device support in progress. Please review documentation for complete list of supported devices.