



PPC400 Debugger

- Full HLL and ASM support available
- Batch processing
- Supports ELF/DWARF format
- 3.3 volt support
- Support for internal triggers
- Break on code or data
- Unlimited software breakpoints
- Fast download (ETHERNET or PARALLEL) up to 600KB/sec

The debugger for IBM PowerPC 400 family allows fast access to the BDM interface of the chip. Up to 450 KByte can be downloaded in 1 second. The systems supports C, C++ and JAVA as well as the debugging of the TPU.

Features

- ❑ Active and Passive JTAG Debugger available
- ❑ Software Compatible to In-Circuit Emulator and Monitor
 - Operation System
 - PRACTICE
 - ASM Debugger
 - HLL Debugger for C and C++
 - Peripheral Windows
- ❑ High-Speed Download
 - Up to 450 KByte/sec
- ❑ Variable Debug Clock Speed
 - 10 kHz...5 MHz
 - 1/4 CPU Clock
 - 1/8 CPU Clock
 - Variable up to 100 MHz (PowerDebug only)
- ❑ Trigger
 - Input from PODBUS
 - Output to PODBUS
- ❑ Support for EPROM/FLASH Simulator
 - Breakpoints in ROM Area
 - 8, 16 and 32 Bit EPROM/FLASH Emulation

Connector

Connector Type

standard 100 mil connector (BETRG, AMP, etc.)

Connector 16 pin

Signal	Pin	Pin	Signal
TDO	1	2	N/C
TDI	3	4	TRST- (*)
N/C	5	6	VCCS
TCK	7	8	N/C
TMS	9	10	N/C
HALT-	11	12	N/C
N/C	13	14	KEY
N/C	15	16	GND

Operation Voltage

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This list contains information on probes available for other voltage ranges. Probes not noted here supply an operation voltage range from 4.5V to 5.5V.

Adapter	Code	OrderNo	Voltage Range
JTAG Debugger for PPC400 (ICD)	DEBUG-PPC400	LA-7723	1.6 .. 5.5 V
JTAG Debugger License for PPC400 Add.	DEBUG-PPC400-A	LA-7723A	1.6 .. 5.5 V
JTAG Debugger Extension for PPC400 (ICD)	DEBUG-PPC400-X	LA-7723X	1.6 .. 5.5 V

Supported Devices

CPU	ICE	FIRE	ICD DEBUG	ICD MONITOR	ICD TRACE	POWER INTEGRATOR	INSTRUCTION SIMULATOR
IOP480			YES		YES		YES
NPE405H			YES		YES		YES
NPE405L			YES		YES		YES
PPC401			YES		YES		YES
PPC403GA			YES		YES		YES
PPC403GB			YES		YES		YES
PPC403GC			YES		YES		YES
PPC403GCX			YES		YES		YES
PPC405			YES		YES		YES
PPC405Axx			YES		YES		YES
PPC405Bxx			YES		YES		YES
PPC405CR			YES		YES		YES
PPC405Cxx			YES		YES		YES
PPC405Dxx			YES		YES		YES
PPC405EP			YES		YES		YES
PPC405EX			YES		YES		YES
PPC405Exx			YES		YES		YES
PPC405Fxx			YES		YES		YES
PPC405GP			YES		YES		YES
PPC405GPR			YES		YES		YES
PPC405LP			YES		YES		YES
PPC405PM			YES		YES		YES

Order Information

Module Description

OrderNo Code	Text
LA-7723 DEBUG- PPC400	JTAG Debugger for PPC400 (ICD) supports (1.8V - 5.0V) PPC40x includes software for Windows, Linux and MacOSX requires Power Debug Module debug cable with 16 pin connector requires LA-7984 if the target has a Mictor38 connector
LA-7723A DEBUG- PPC400-A	JTAG Debugger License for PPC400 Add. supports PPC40x Extension applicable to the following debug cables (purchased separately): for LA-3730 (Debugger for MicroBlaze) please add the serial number of the base debug cable to your order
LA-7723X DEBUG- PPC400-X	JTAG Debugger Extension for PPC400 (ICD) Extension applicable to the following debug cables (purchased separately): LA-7752 JTAG Debugger for PPC440 (ICD) requires a valid software guaranty or a valid software license key please add the serial number of the base debug cable to your order
LA-3731 JTAG-PPC- CON-XILINX	JTAG Converter to Xilinx Target Adapter 14 Converter from PPC400 16 pins to Xilinx PPC400/Microblaze 14 pins target adapter
LA-7986 JTAG-PPC4XX- 2X38	Mictor-Mictor-JTAG 16pin Converter for PPC4xx Converter MICTOR 38 on target to 16 pin male connector JTAG Debugger PPC4XX and MICTOR 38 of LA-7929 Preprocessor for PPC4xx family fast flex or LA-3900 Preproc. for PPC4XX AUTOFOCUS II Flex required if no separate JTAG connector is provided on the target

Detailed Order Information

Order No.	Code	Text
LA-7723	DEBUG-PPC400	JTAG Debugger for PPC400 (ICD)

Order No.	Code	Text
LA-7723A	DEBUG-PPC400-A	JTAG Debugger License for PPC400 Add.
LA-7723X	DEBUG-PPC400-X	JTAG Debugger Extension for PPC400 (ICD)
LA-3731	JTAG-PPC-CON-XILINX	JTAG Converter to Xilinx Target Adapter 14
LA-7986	JTAG-PPC4XX-2X38	Mictor-Mictor-JTAG 16pin Converter for PPC4xx
Additional Options		
LA-7752X	DEBUG-PPC44X-X	JTAG Debugger Extension for PPC44x (ICD)
LA-3730A	JTAG-MICROBLAZE-A	JTAG Debug. License for MicroBlaze Additional
LA-7984	JTAG-PPC4XX-CON-38	JTAG Converter to Mictor 38 for PPC4xx
LA-7960X	MULTICORE-LICENSE	License for Multicore Debugging

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