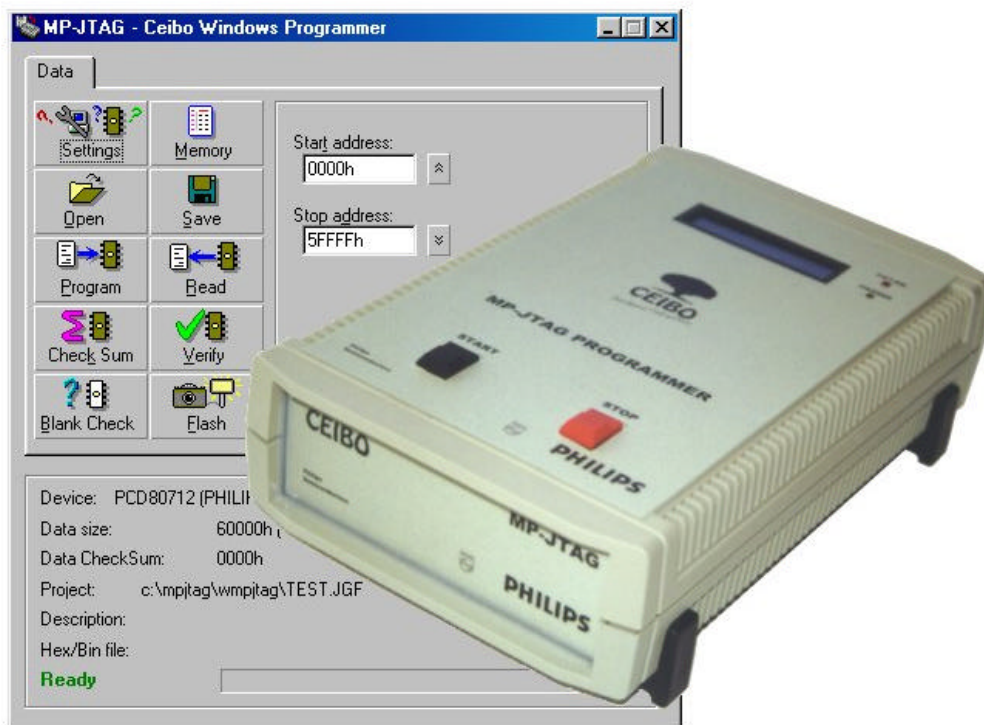# CEIBO MP-JTAG PROGRAMMER

Programmer for JTAG interfaced Devices

FEATURES

- **JTAG Device Interface Programmer**

- **In-System Programming Support**

- **PC Hosted or Stand Alone Operation**

- **Dynamically Adaptable Logic levels 1.2-5V**

- **Programmable Vpp 1-25V**

- **Handles Standard Hex and Binary files**

- **MS-Windows User Interface**

- **Performance up to Device Limit**

- **Programming Adapters**

DESCRIPTION

The MP-JTAG programmer is used to program different devices with a JTAG interface. It consists of a box externally connected to a PC by means of a serial link RS-232 at 115Kbaud. Furthermore, the programmer can operate stand alone without any computer. The PC controlled mode will be referred to as "engineering mode", allowing software operations not needed in the duplication of OTPs. The "production mode" uses an internal FLASH Memory to duplicate the chips and the programmer can be controlled by a few pushbuttons. The internal FLASH Memory is loaded using the software capabilities.

SPECIFICATIONS

JTAG INTERFACE
Frequency: The maximum frequency is 25MHz. This is generated by a programmable source from 100KHz to 25MHz in steps of 10KHz. Frequency setting is software controlled. Connector: 2-row of 5-pins 0.1" Signals: TRST, TDI, TDO, TMS, TCK, Ground . Signal levels: dynamically adaptable from 1.2V to 5V.

EXTENSION SOFTWARE
Connector: D-Type 25 pin female Signals: Vpp, Start in, Passed out, Failed out, EOT out, Vcc, Ground, Spare I/Os. Vcc level: dynamically adaptable from 1.2V to 5V Vpp level: programmable from 1V to 25V.

PROGRAMMER ADAPTER
Connected to JTAG connector. Allows direct device programming on a ZIF socket

MEMORY
SRAM (for engineering mode): up to 1Mbyte
Internal Flash (for production mode): up to 1Mbyte internal

PERFORMANCE
Production mode: data is programmed from a Flash Memory at the maximum rate that the device under programming allows.
Engineering mode: first the data will be transferred from the PC by RS-232 at 115K Baud. Once the data is stored in the programmer SRAM, the communication is reduced to a simple command set (program, blankcheck, etc.) hence, performance will remain similar to production mode.

USER SOFTWARE
MS-Windows (95, NT or later) based software interface including the following functions: Program, Read, Compare, Blankcheck, Checksum, Load, Save, Program Master Flash, Signature, Security.

SUPPORTED DEVICES
PCD80710/12. Call Ceibo to receive the latest update.

CONTROL PANEL
The control panel used in Production Mode has the following components:
LC (2x16), Start Button, Stop Button, Pass LED, Fail LED.

Signal Name	9-Pin Male Connector (MP-JTAG Side)
Receive Data	Pin 3
Transmit Data	Pin 2
Signal Ground	Pin 5

HOST CHARACTERISTICS
IBM PC or compatible system with 8Mbytes of RAM, and one RS-232 port.

INPUT POWER
85VAC to 265VAC, 50hz to 60Hz. That makes this unit suitable for any country outlet.

MECHANICAL DIMENSIONS
MP-JTAG is 155mm long, 60mm high and 250mm wide.

ITEMS SUPPLIED AS STANDARD
MP-JTAG programmer, User's Software, User's Manual, RS-232 Interface Cable and In-System JTAG Interface Cable. Power cord not included

OPTIONS
Automatic handler interface cable.

WARRANTY
Two years limited warranty, parts and labor.

MP-JTAG ORDERING INFORMATION

Item	Description
MP-JTAG	Programmer, Software, Cables