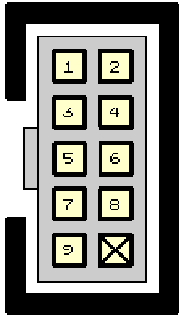
CAPR-EC programming / debugging interface pinout (top view of the application circuitry connector)



MLW10 connector

Pin no.	eCOG1 pin	Input resistors
1	eICE_MOSI	pulldown
2	VDD	-
3	eICE_CS	pulldown
4	GND	-
5	eICE_LOAD#	pullup
6	GND	-
7	eICE_CLOCK	pulldown
8	GND	-
9	eICE_MISO	-
(10)	not connected	-

Note: Recommended resistors in the application circuitry - pulldown = 100 kΩ to GND, pullup = 100 kΩ to VDD

CAPR-EC

CAPR-EC is a **programmer/debugger** by ASIX s.r.o. designated for development and programming of application based on **eCOG1** microcontrollers by Cyan Technology.

CAPR-EC is compatible with freely available software development kit **CyanIDE** and legacy eCOG1 Toolkit.

CAPR-EC connects to PC using standard parallel port (LPT) and uses power supply for its operation from the application circuitry.

Two LEDs provide the user with a convenient way of checking the immediate status of the device.

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Technical specification

- Connects to PC using parallel port
- Power supply of 3.3 V from application
- Operation environment temperature: 5 to 50 °C
- Environment relative humidity: max. 90 %

Package contents

- CAPR-EC programmer/debugger
- 25F25MCABLE – LPT extension cord
- CACAPEC – application interfacing cable
- CD-ROM with software a documentation
- Quick start guide

Installation

Turn off the computer. Connect CAPR-EC to its parallel port using 25-lead extension cord (included). Connect CAPR-EC to suitable application circuitry interface using 9-lead ribbon cable (see chapter *Application connection*). Turn the computer on. Switch on the application power supply.

Software

The software CyanIDE is available at Cyan web site: http://www.cyantechnology.com/

This freely available development suite includes:

- Integrated development environment for Windows
- C compiler
- Assembler
- Linker
- Software simulator
- Support for in-circuit emulation/debugging
- Complete documentation for software and MCU
- Application examples

Hardware

CAPR-EC uses standard parallel port (LPT) to communicate with PC.

Power supply for operation of CAPR-EC is drawn from the application circuitry (3.3 V). Presence of the power supply voltage and device ready status is indicated by a green LED (*Pwr*). The yellow LED (*Busy*) indicates, a communication in progress.

It is not allowed to disconnect programming/debugging interface while software communicates with CAPR-EC, i.e. when the yellow LED is lit.

Application interface

The eCOG1 pins concerned with a special in-circuit programming/debugging interface are connected to CAPR-EC using double row 10-pin connector with 0.1 inch spacing (2.54 mm).