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### CHANGES

20040323 v01.00 creation  
(mihi)

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### First steps – Hardware

Note: A small note at the beginning for our native English customers: You will easily find out that our English is not perfect. So if you don't understand something, if you have questions or suggestions, please email us so we can improve our documentation! Thanks a lot!

This document describes the components of the COBRA5282 starter kit and the installation and set-up.

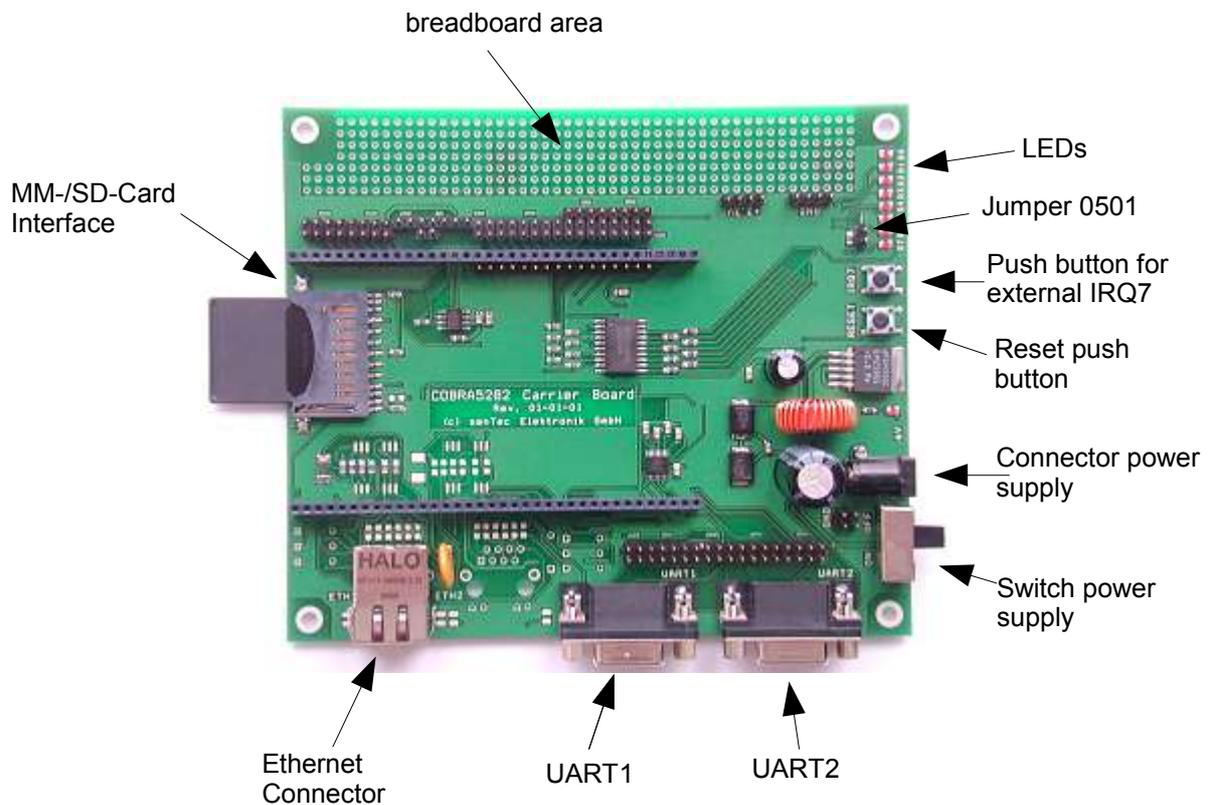
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## 1 The COBRA5282 Starter Kit

The COBRA5282 Starter Kit consists of the following components:

- A COBRA5282 Module with 4 MByte Flash and 8 MByte RAM,
- A Carrier Board to connect the COBRA5282 Module,
- A CD with documentation and software,
- Optionally you can purchase a distribution of the operating system uClinux for the COBRA5282 Module (COBRA5282/LNX).

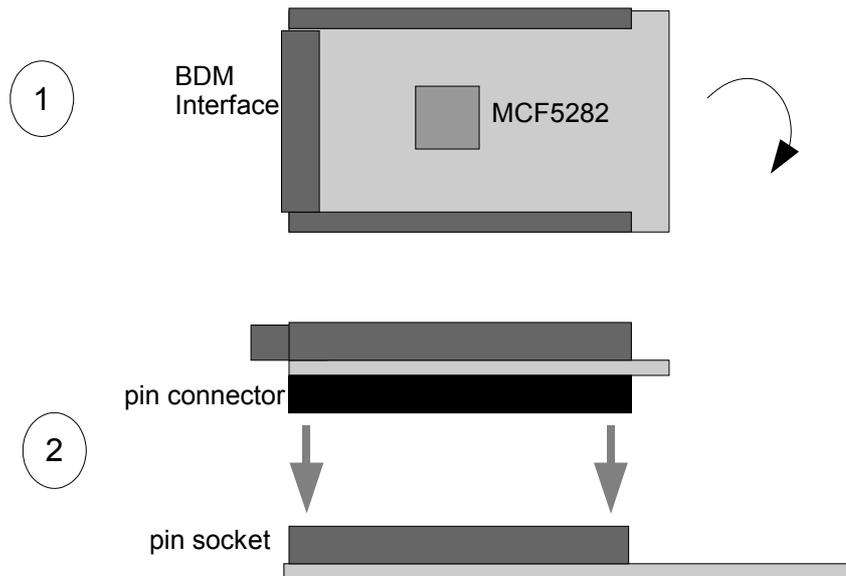


**Figure 1 COBRA5282 Carrier Board**

Note: The Multimedia Card / SD Card itself is not a part of the Starter Kit.

## 2 The COBRA5282 Carrier Board

The Carrier Board is used as a basis for any development using the COBRA5282 Module as well as a test and development environment. The COBRA5282 Module is attached to the Carrier Board as shown in figure 2.



**Figure 2 The COBRA5282 Module is plugged on the Carrier Board**

The Carrier Board provides a stabilized voltage supply and all the interfaces necessary to connect the module:

- Two connectors 2 x 36 pins (pitch 2.54mm) to plug-on the module,
- An interface for the power supply,
- Two RS232 interfaces used for UART1 and UART2,
- An Ethernet interface,
- Connectors for special function pins of the COBRA5282 Module,
- Pin rows for connections to the SPI and CAN interface,
- A Multimedia / SD Card interface,
- 8 LEDs at the ports PTC and PTD (can be activated with jumper J0501),
- A push button for RESET.

Details can be found in the schematics diagram and figure 3:



**Figure 3 COBRA5282 Module connected to the Carrier Board**

### **3 Installation and set-up of the hardware**

The Starter Kit for the COBRA5282 Module is delivered with a Carrier Board, which delivers voltage supply and provides the most important interfaces. The COBRA5282 Module also can be used on a customized Carrier Board, if needed.

Below you can find a description of the most important steps to integrate the COBRA5282 Module into a functioning working environment:

- Make sure that the COBRA5282 Module is placed on the Carrier Board the right way, so that the component side of the COBRA5282 Module points to the top. Make sure that the module is put in the correct way. To check this, please examine the pins of the two 36 pin connectors. On the Carrier Board of the Starter Kit there is a marking which should correspond to the marking of the COBRA5282 Module.
- (optionally) Install and configure a (second) network card in your PC for communication with the target. Therefore you have to assign an IP address to this card (for example IP 192.168.100.1). Using a second card has the advantage that errors in the target's network don't affect your company's network.

- Connect the Ethernet interface of the target with the Ethernet interface of the host using a “Cross-Over“ Ethernet cable or standard Ethernet cables and an Ethernet hub.
- Connect the serial RS232 Interfaces of the host PC and the target with a standard serial cable. Use the configuration: 19200 Baud, 8 data bits, no parity, 1 stop bit, no flow control
- (optionally) If necessary start a terminal program on the host PC in order to examine the correct configuration of the target.
- Connect the power supply to the target. If you use a starter kit board your power supply should deliver 500mA at a voltage of 6V. In the terminal window you should see now the prompt of the dBUG monitor after starting the board.
- The installation of the hard- and software of the host system is not part of this documentation. Please refer to the manuals of the manufacturer and/or suppliers of the system components.