
CRUVI Modules and Carriers

Release 1.0.0-alpha

MicroFPGA UGh & contributors

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If you want the SPECIFICATION please get it from here:

[CRUVI specification](#)

LIST OF CRUVI LS (LOW SPEED) MODULES

1.1 CR00001 SPI Flash BGA24



This module is a simple SPI Flash add-on board. Can be assembled with any SPI flash in BGA24 6x8 mm package. I2C identification EEPROM is provided. Note that only 3.3V SPI Flashes are supported by the standard CRUVI LS hosts. It is allowed to use CR00001 with 1.8V Flash if your CRUVI LS host board supports 1.8V VCC for the LS slot.

CRUVI	Net Name	Note
1	I2C SDA	
2	I2C SCL	
3	SPI DQ3	
4	SPI CS	
5	SPI DQ2	
7	SPI DQ1	
8	SPI SCK	
9	SPI DQ0	
6	GND	
10	VCC	3.3V

1.2 CR00002 SPI Flash SO8

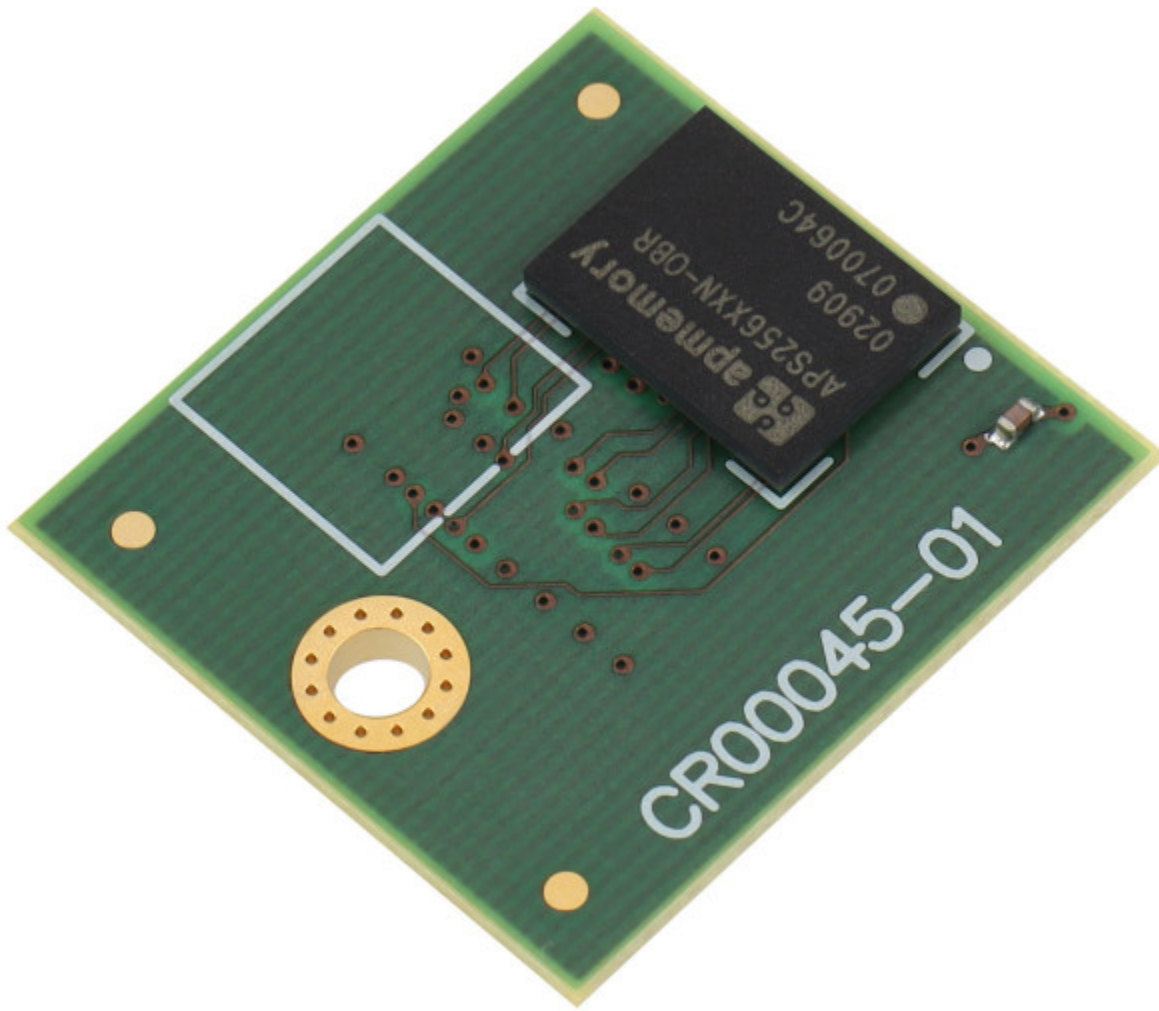
This module is a simple SPI Flash add-on board. Can be assembled with any SPI flash in SO8 package. I2C identification EEPROM is provided. There is optional additional I2C EEPROM on board. Note that only 3.3V SPI Flashes are supported by the standard CRUVI LS hosts. It is allowed to use CR00002 with 1.8V Flash if your CRUVI LS host board supports 1.8V VCC for the LS slot.

HS MODULES

2.1 CR00041 HyperRAM/xSPI

This module can be assembled with HyperRAM, HyperFlash or Octal/xSPI Flash, they all share common footprint.

2.2 CR00045 PSRAM

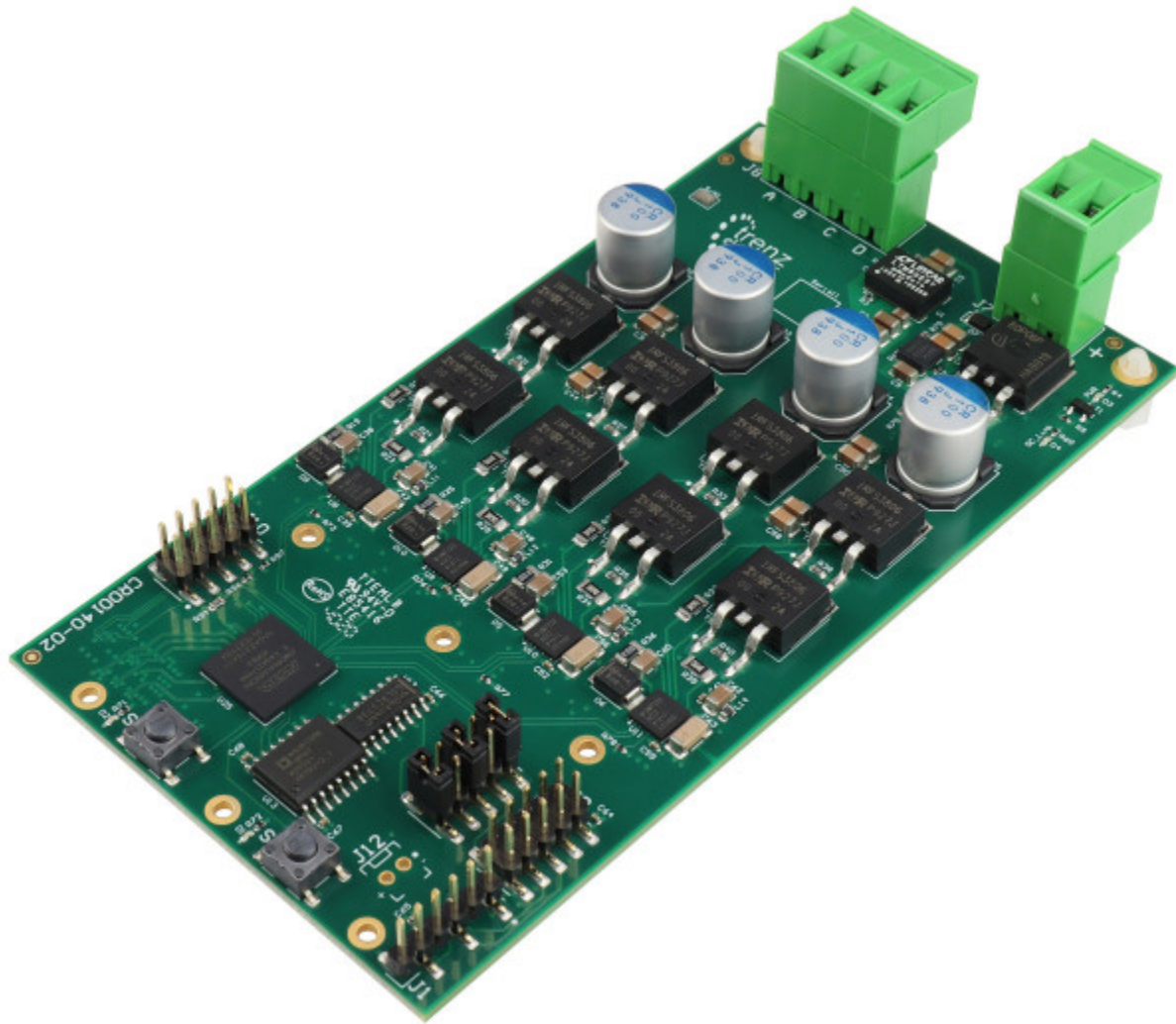


PSRAM add-on board for AP Memroy PSRAM devices, 8 and 16 bit mode supported. VCCIO adjustable must be 1.8V.

2.3 CR00049 eMMC

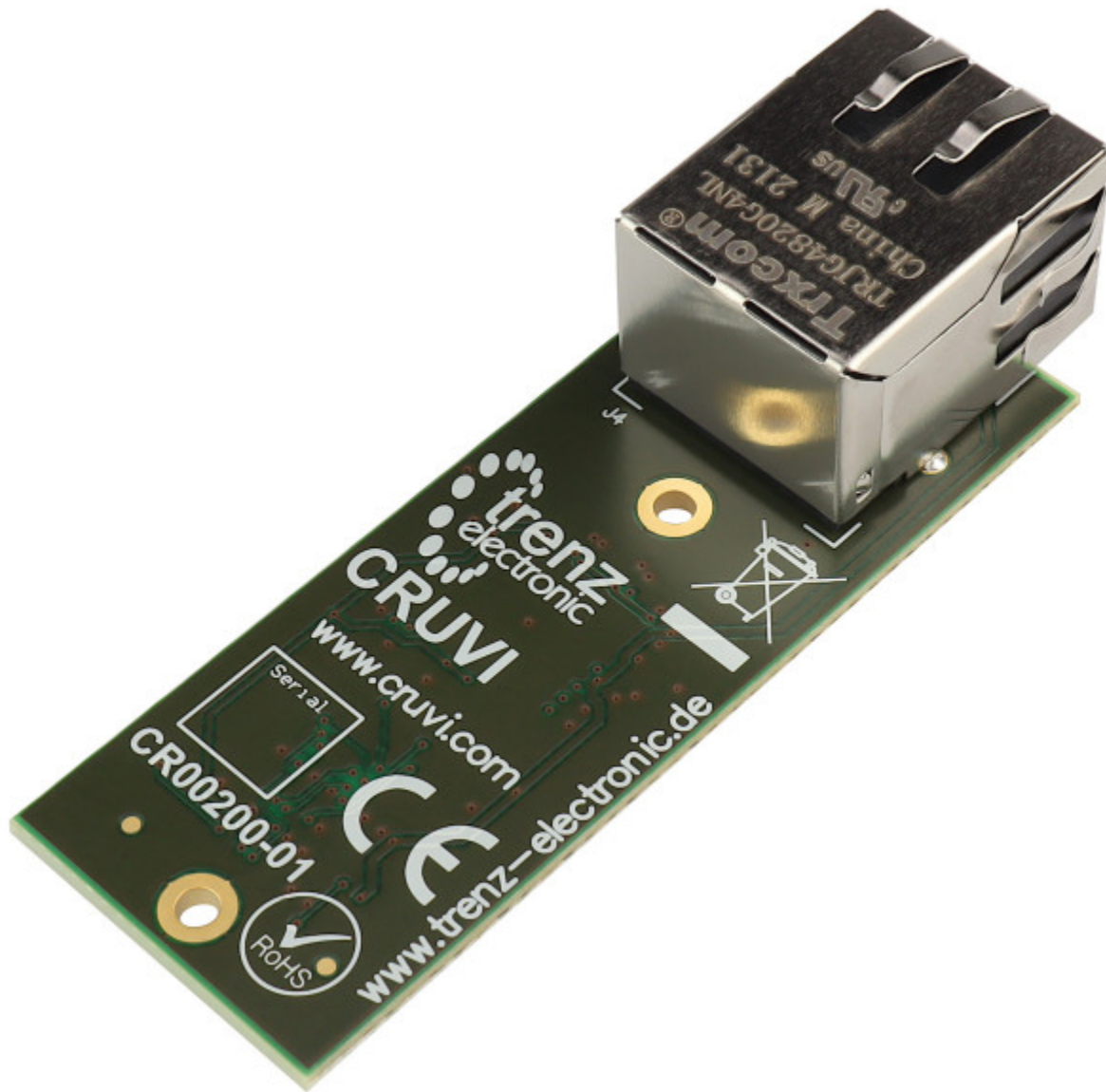
CRUVI HS board with eMMC device.

2.4 CR00140 Motor control



CRUVI HS board for motor control application. Tripple wide HS board with extended length.

2.5 CR00200 Ethernet 88E1512



This adapter board follows CRUVI specification for RGMII interface. VCC adjustable range 1.8V to 3.3V.

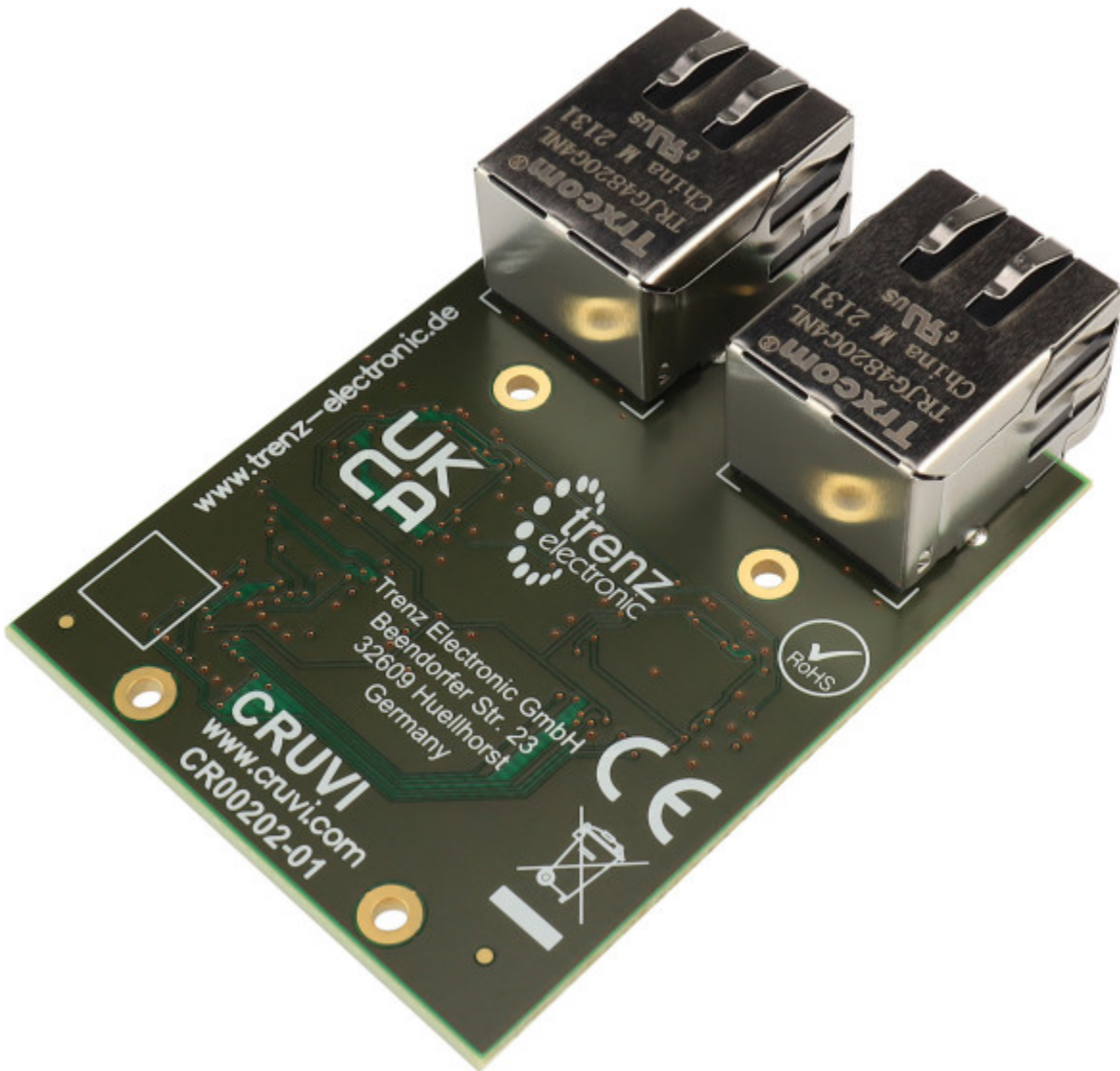
2.6 CR00201 Ethernet ADIN1300

This module is in pre-production, available soon!

This adapter board follows CRUVI specification for RGMII interface. VCC adjustable range 1.8V to 3.3V.

This module is very similar to CR00200 with the exception that different PHY is in use ADIN1300 from Analog Devices.

2.7 CR00202 Ethernet 88E1512 Dual



This adapter board follows CRUVI specification for dual RGMII interface. VCC adjustable range 1.8V to 3.3V.

2.8 CR00203 Ethernet ADIN1300 Dual

This module is in pre-production, available soon!

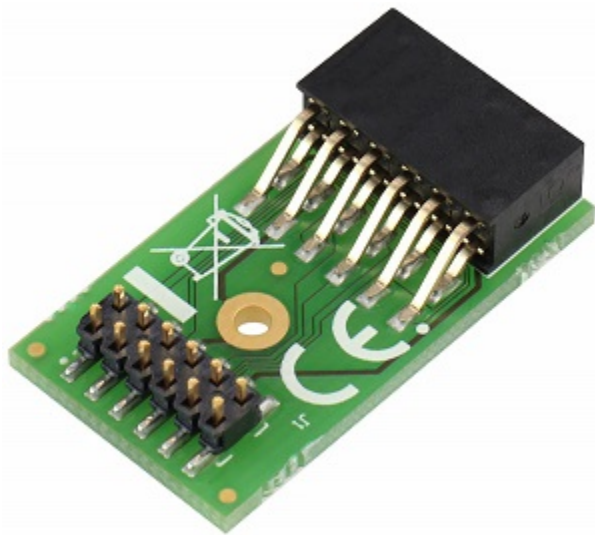
This adapter board follows CRUVI specification for dual RGMII interface. VCC adjustable range 1.8V to 3.3V.

This module is very similar to CR00202 with the exception that different PHY is in use ADIN1300 from Analog Devices.

LIST OF ADAPTER BOARDS

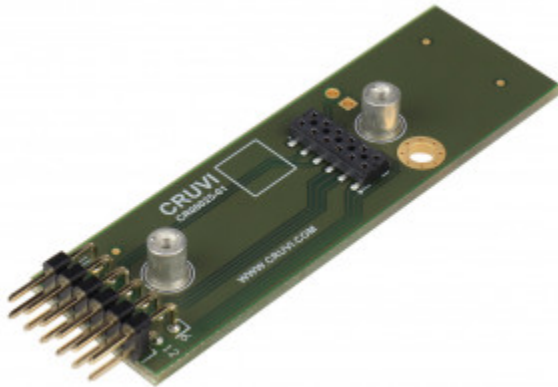
List of various adapter boards converting to/from some other form-factor or standard.

3.1 CR00005 LS to Pmod Adapter



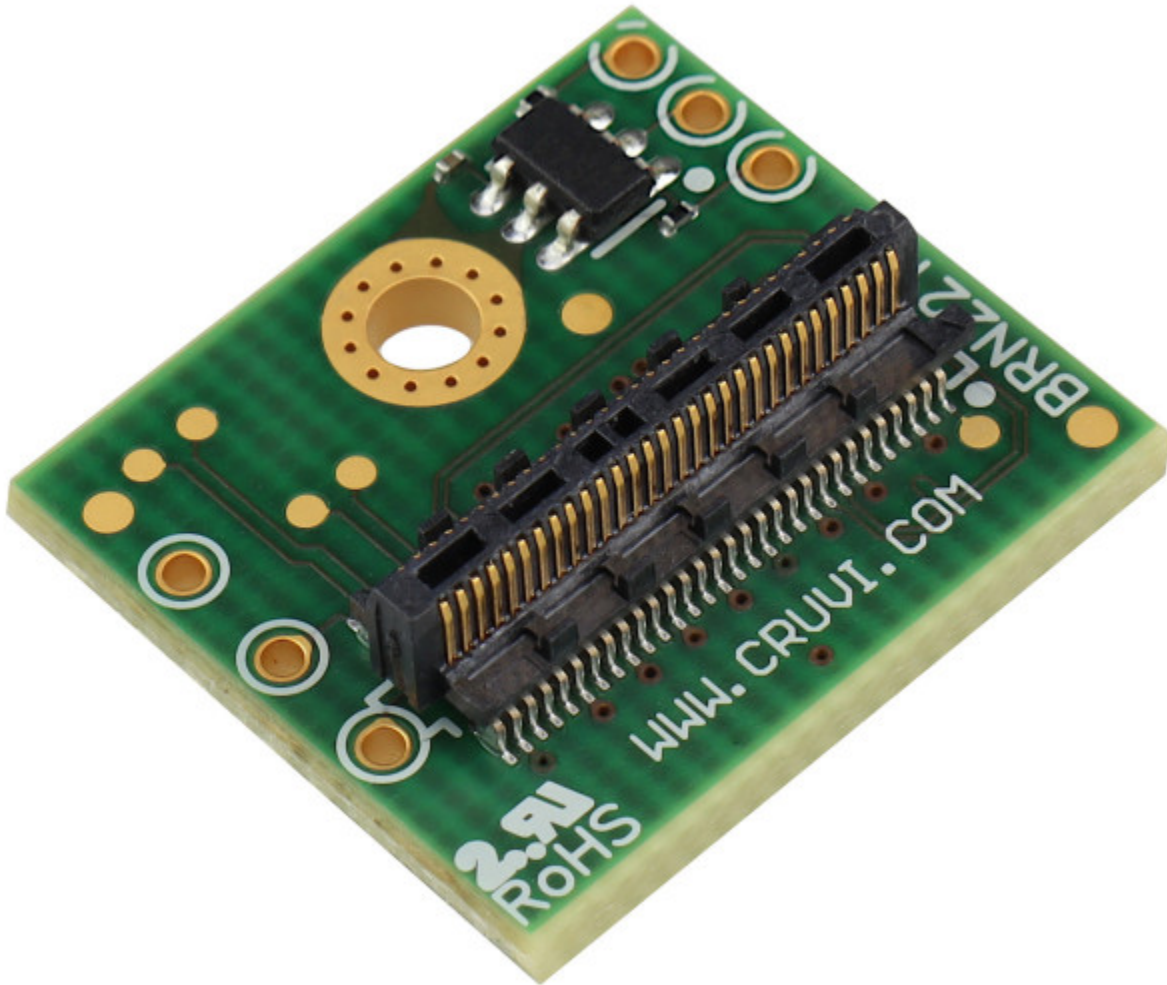
This is purely passive 1:1 Adapter from CRUVI LS to Pmod connector. There are only two connectors and no active or passive components on board.

3.2 CR00025 LS from Pmod Adapter



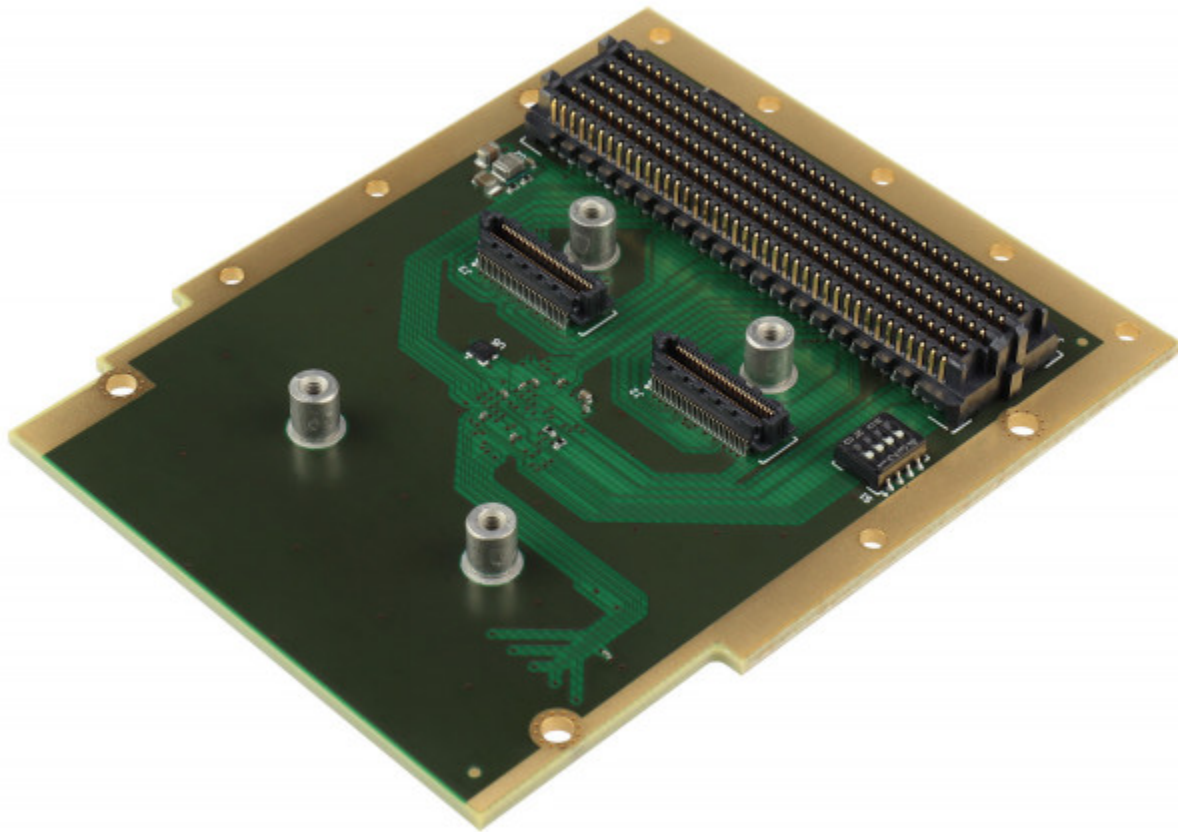
This is purely passive 1:1 Adapter from Pmod to CRUVI LS connector. There are only two connectors and no active or passive components on board. For optional 5V VBUS voltage there are pin header holes for optional power header.

3.3 CR00091 HS Loopback Adapter



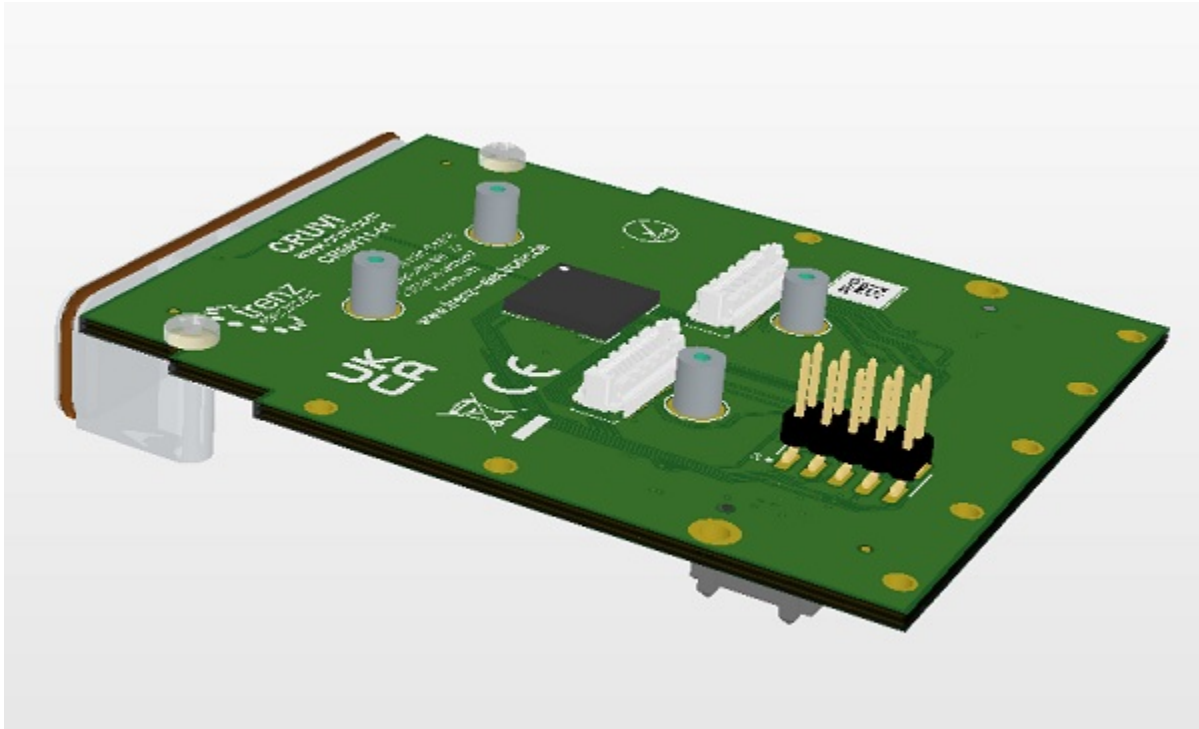
Loopback adapter for CRUVI HS slot. All signals are looped back for test purposes. Voltage rails have LED's to indicate voltage presence.

3.4 CR00101 FMC Adapter



FMC to CRUVI HS adapter for low profile HS modules. Note for other HS modules (not low profile) another FMC card must be used. Single and dual wide CRUVI HS boards are supported.

3.5 CR00111 FMC Adapter



FMC to CRUVI HS adapter. Single, dual and tripple wide CRUVI HS boards are supported, no restriction on component height.

MINI CARRIERS

This is a list of “mini” carrier boards for CRUVI modules. It is also possible to use them in reverse mode as a SoM.

4.1 CR00010 MAX10 (VHDplus)

This is a special mini carrier developed and produced for exclusive use by VHDPlus as [Core MAX10](#).

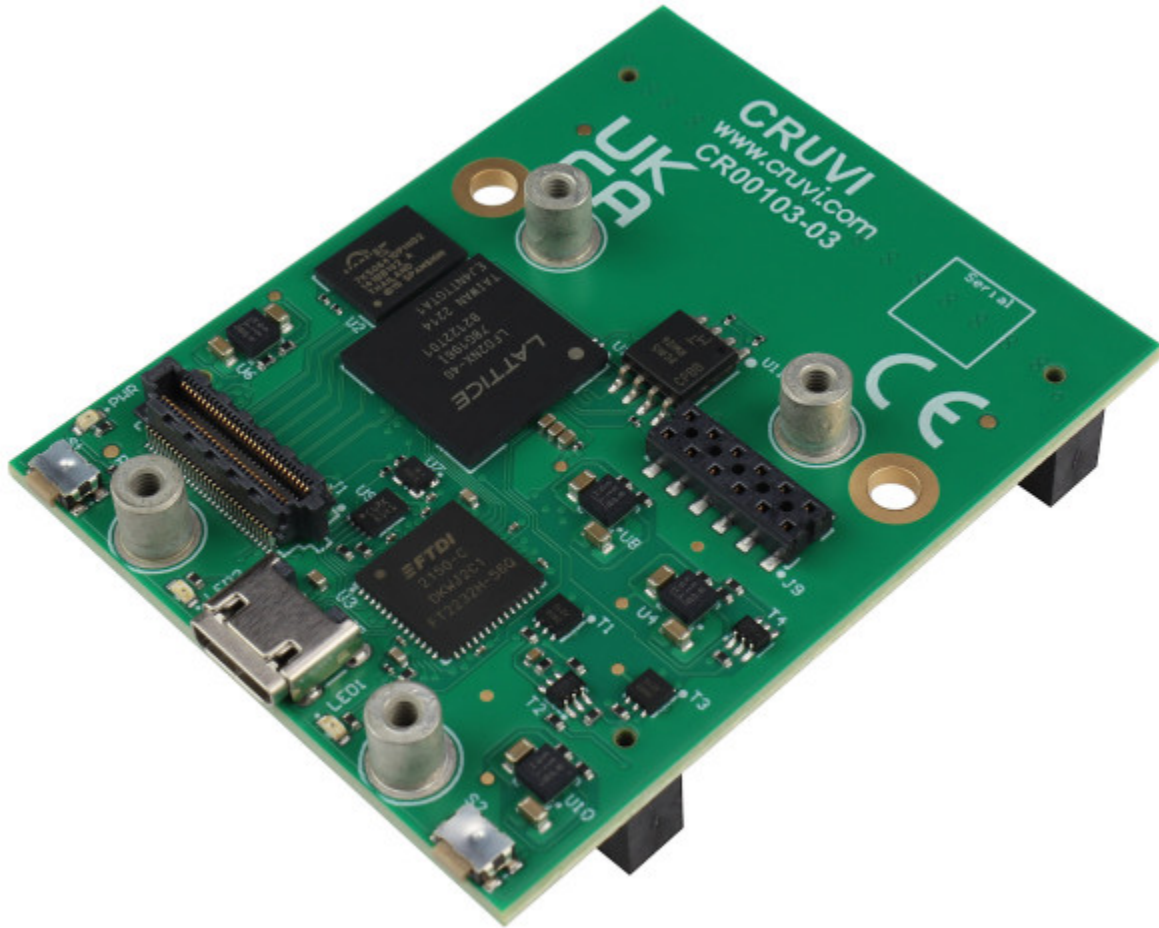
Note that the 100mil pin headers on the bottom side of the board are not covered by the CRUVI Standard.

Additional information can be found at [VHDPlus website](#).

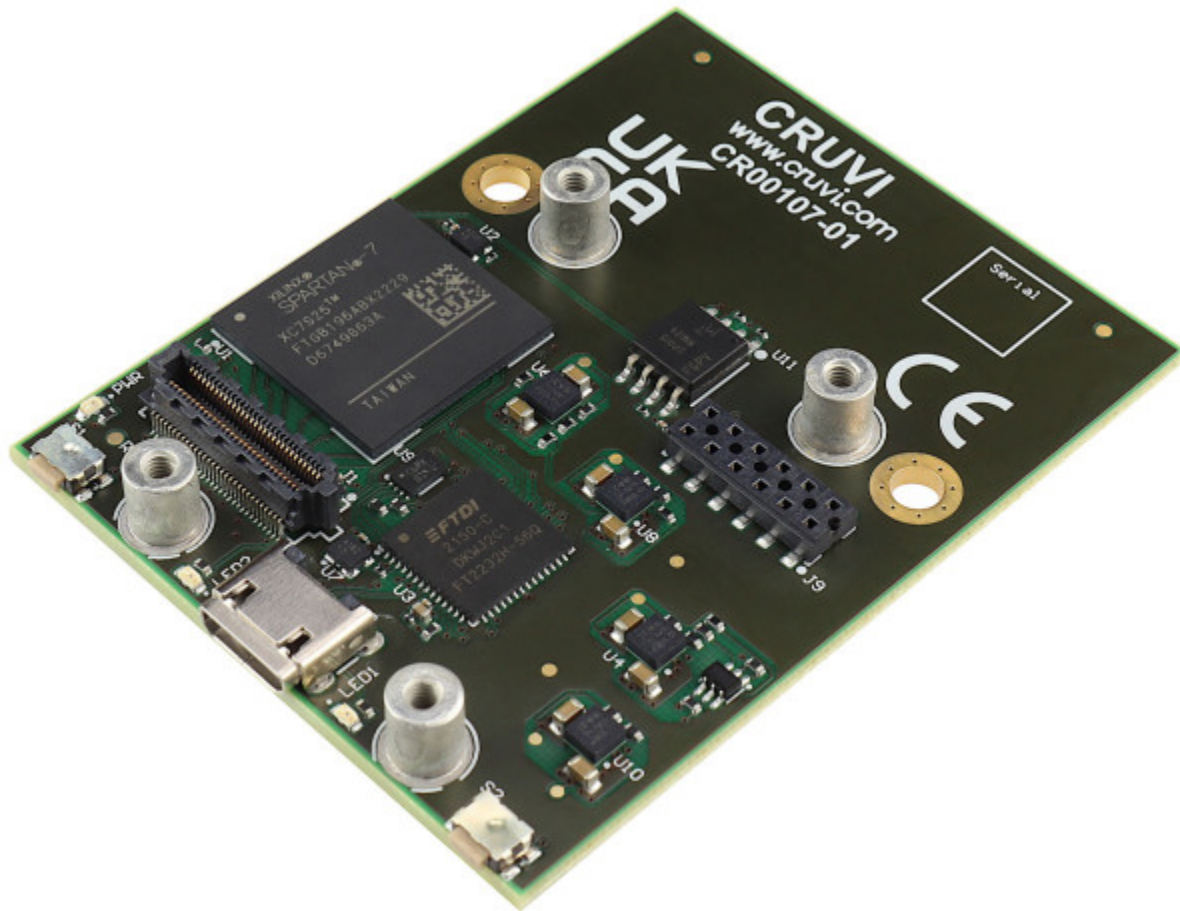
4.2 CR00100 MAX10



4.3 CR00103 Certus-NX



4.4 CR00107 Spartan-7



CARRIER BOARDS

This is a list of carrier boards for CRUVI modules.

5.1 TEB0707 4x5 SoM Carrier

