SCF0003 CPLD

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Overview

Firmware for PCB CPLD with designator U15. Second CPLD Device in Chain: LCMX02-256HC

Feature Summary

• JTAG

Firmware Revision and supported PCB Revision

See Document Change History

Product Specification

Port Description

| Name / opt. VHD Name | Direction | Pin | Description |
|-------------------------|-----------|-----|-------------|
| CPLD_IO1 | in | 12 | FPGA |
| CPLD_IO2 | out | 13 | FPGA |
| FMC_TCK | in | 30 | JTAG FMC J1 |
| FMC_TDI | in | 32 | JTAG FMC J1 |
| FMC_TDI_TOP | out | 28 | JTAG FMC J6 |
| FMC_TDO | out | 1 | JTAG FMC J1 |

| FMC_TDO_TOP | out | 27 | JTAG FMC J6 |
|-------------|-----|----|---|
| FMC_TMS | in | 29 | JTAG FMC J1 |
| JTAGEN | in | 26 | Enable JTAG access to CPLD for Firmware update (zero: normal IOs, one: CPLD JTAG access). Selectable over J7 Jumper |
| PRSNT_TOP | in | 25 | FMC J6 Present |
| TCK | out | 9 | JTAG FPGA |
| TDI | out | 11 | JTAG FPGA |
| TDO | in | 10 | JTAG FPGA |
| TMS | out | 8 | JTAG FPGA |

Functional Description

JTAG

Connected to FPGA JTAG, if JTAGEN is zero. J6 FMC JTAG connector is add into JTAG Chain, if PRSNT_TOP is zero and CPLD_IO1 is one. PRSNT_TOP has internal pulldown on CPLD and CPLD_IO1 internal pullup. FPGA IOs are flouting, if FPGA is not programmed.

| JTAGEN | PRSNT_TOP | CPLD_IO1 | Description |
|--------|------------|------------|---|
| 1 | don't care | don't care | CPLD is in the JTAG Chain |
| 0 | 0 | 0 | Only Module FPGA is in the JTAG Chain |
| 0 | 0 | 1 | Module FPGA and FMC J6 are in the JTAG Chain. Note FMC J6 Chain must be closed. |
| 0 | 1 | 0 | Only Module FPGA is in the JTAG Chain |
| 0 | 1 | 1 | Only Module FPGA is in the JTAG Chain |

CPLD_IO2 is one, if second module is present and CPLD_IO1 is set one, otherwise it's zero.

Appx. A: Change History and Legal Notices

Revision Changes

Document Change History

To get content of older revision got to "Change History" of this page and select older document revision number.

| Date | Document Revision | CPLD Firmware Revision | Supported PCB Revision | Authors | Description |
|------|-------------------|------------------------------|------------------------------|---------|----------------|
| | | REV01 | REV01 | | REV01 finished |
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REACH, RoHS and WEEE

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Users of electrical and electronic equipment in private households are required not to dispose of waste electrical and electronic equipment as unsorted municipal waste and to collect such waste electrical and electronic equipment separately. By the 13 August 2005, Member States shall have ensured that systems are set up allowing final holders and distributors to return waste electrical and electronic equipment at least free of charge. Member States shall ensure the availability and accessibility of the necessary collection facilities. Separate collection is the precondition to ensure specific treatment and recycling of waste electrical and electronic equipment and is necessary to achieve the chosen level of protection of human health and the environment in the European Union. Consumers have to actively contribute to the success of such collection and the return of waste electrical and electronic equipment. Presence of hazardous substances in electrical and electronic equipment results in potential effects on the environment and human health. The symbol consisting of the crossed-out wheeled bin indicates separate collection for waste electrical and electronic equipment.

Trenz Electronic is registered under WEEE-Reg.-Nr. DE97922676.

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