# TE0722 Getting Started

**2015**

First year an Xilinx 7 series based product or Zynq based product passed into semifinals for the

HackdaDay prize

**Trip To Space**

A small step for those on the way to

All Programmable ...

**... world?**

open source hardware

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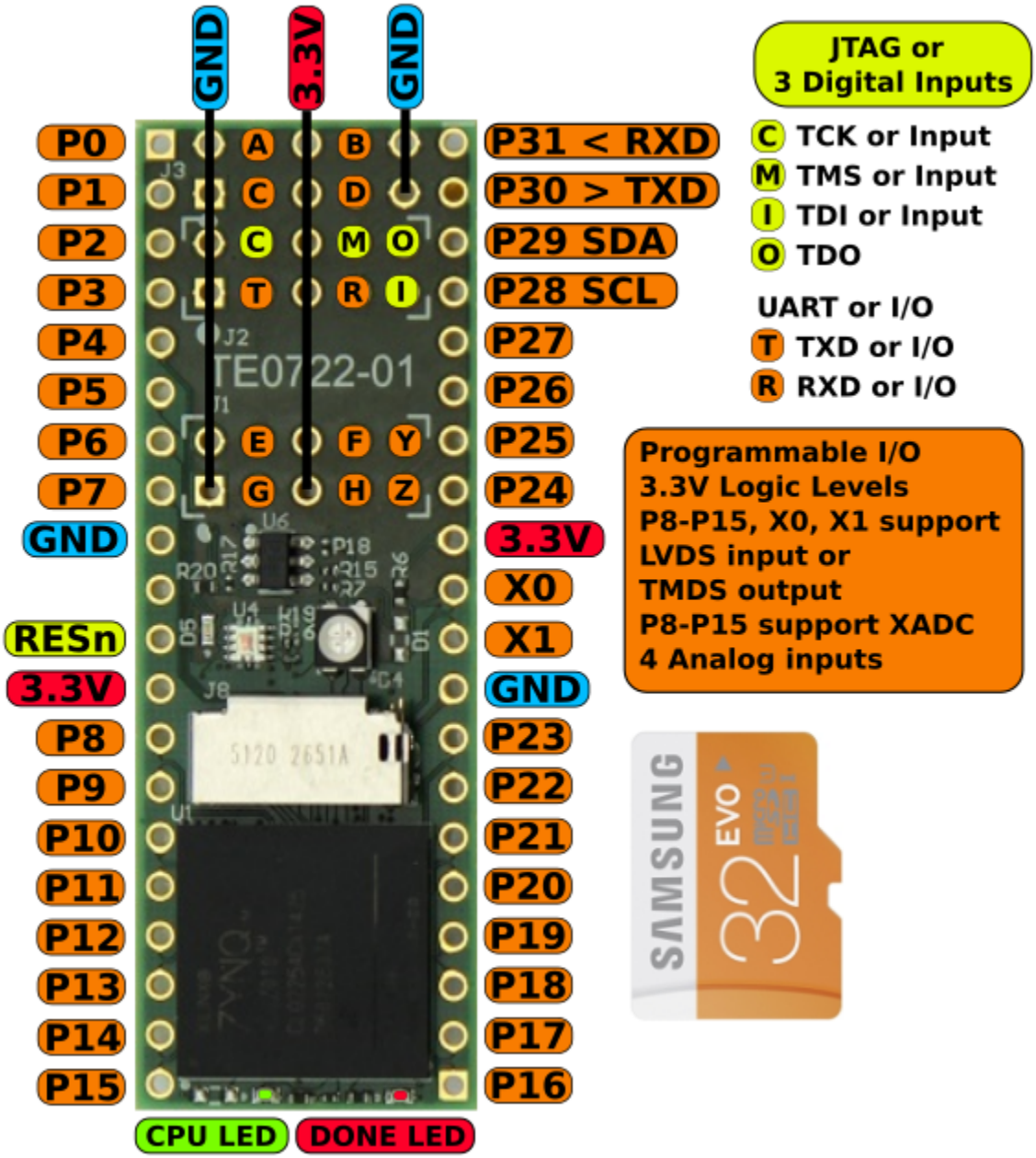
## Overview




⚠ TE0722 Zynq Module is without DDR, special FSBL is needed to startup correctly see, DDR less ZYNQ Design

## Power supply

TE0722 need external 3.3V power supply. It is possible but not recommended to supply TE0722 with TE0790 programmer, but only for small designs (max ~300mA over XMOD possible).

If TE0722 is powered via XMOD (max. ~ 300mA), use XMOD DIP-Switch:

| POS | Value |
|---|---|
| 1 | ON |
| 2 | OFF |
| 3 | ON |
| 4 | ON |

If TE0722 is powered with external 3.3V, use XMOD DIP-Switch:

| POS | Value |
|---|---|
| 1 | ON |
| 2 | OFF |
| 3 | OFF |
| 4 | OFF |

## DIP-Switches

There are no DIPs on TE0722. In case of TE0790 (XMOD) usage, see power supply section.

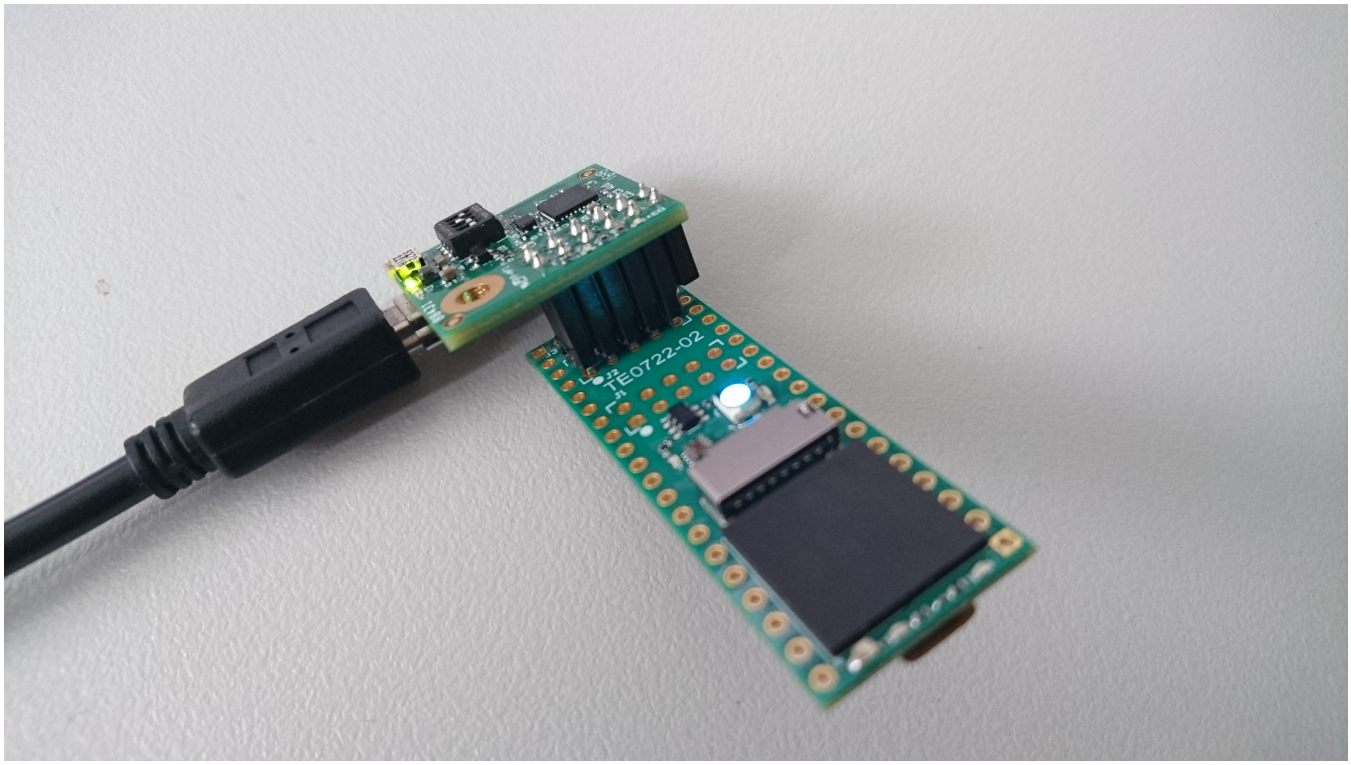
## LEDs

Working in process. Will be coming soon.

## JTAG/UART

JTAG and UART is possible over J2 connector.

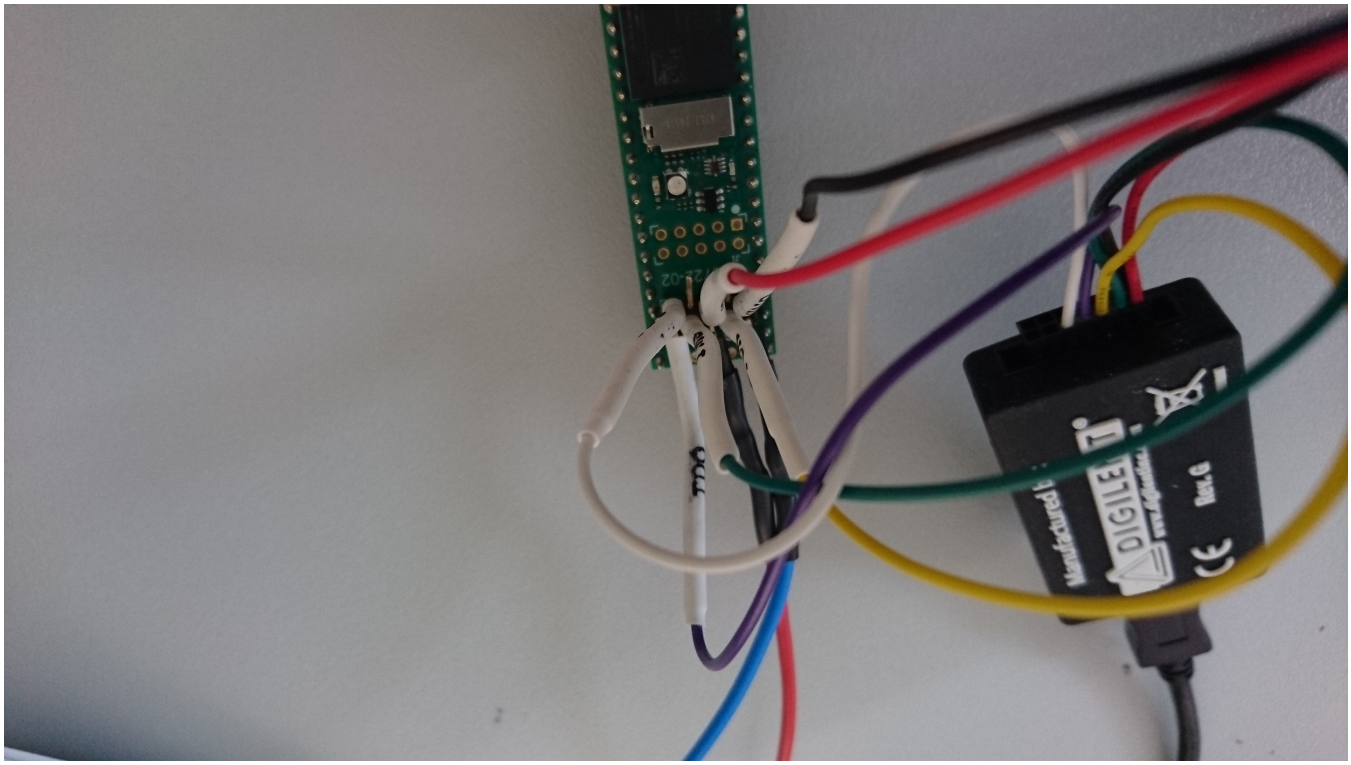
## Use XMOD (TE0790) Programmer with special firmware




XMOD Programmer support JTAG and UART over same USB cable.

- XMOD DIP Switch settings: See power supply section
- XMOD Firmware: Special XMOD CPLD Firmware is needed, see: TE0790 CPLD Firmware  Firmware (SC-PGM-TE0790-0203_XMOD_DIP40-01_20170426) is available on : TE0790 Download Area/<Revision>/Firmware

## Use other JTAG Programmer




With other Programmer only JTAG is possible. UART must be connected separate.

| TE0722-J2 Pin | TE0722-Name | Platform Cable - Name | Platform Cable - Color | external power supply |
|---|---|---|---|---|
| 1 | GND | -- | -- | GND |
| 2 | GND | GND | black | -- |
| 3 | B34_L4_N(def. UART TX) | -- | -- | -- |
| 4 | TCK | TCK | yellow | -- |
| 5 | 3.3V | VREF | red | -- |
| 6 | 3.3V | -- | -- | 3.3V |
| 7 | B34_L10_P(def. UART RX) | -- | -- | -- |
| 8 | TMS | TMS | green | -- |
| 9 | TDI | TDI | white | -- |
| 10 | TDO | TDO | violet | -- |

# Reference Designs

- TE0722 Reference Designs

# Notes

- TE0722 Resources

- DDR less ZYNQ Design
- TE0790 Resources