# **Pizzabox Configuration - FPGA Parameters**

The following parameters are stored in EEPROM on BPM-DFE and read by the FPGA for configuration.

## **Network parameters**

### Raw apps

Network parameters for raw apps are set in SDK project 🡪raw\_apps 🡪src🡪main.c🡪int main().

#### MAC address

Set **unsigned** **char** mac\_ethernet\_address[].

#### IP address

Set ipaddr when calling IP4\_ADDR.

#### Network mask

Set netmask when calling IP4\_ADDR.

#### Gateway

Set gw when calling IP4\_ADDR.

### Socket apps

Network parameters for socket apps are set in SDK project 🡪socket\_apps 🡪src🡪ssp\_eeprom.c🡪void EE\_DefaultConfig(SSP\_Config\_t \*cfg).

#### MAC address

Set **cfg->net\_cfg.mac\_address** when calling **store\_mac()**.

#### IP address

Set **cfg->net\_cfg.ip\_address** when calling **store\_IP4()**.

#### Network mask

Set **cfg->net\_cfg.ip\_netmask** when calling **store\_IP4()**.

#### Gateway

Set **cfg->net\_cfg.ip\_gateway** when calling **store\_IP4()**.

See the appendix for the parameters set on Pizzabox in the beamlines.

#### TCP port for Rx

TCP port for Rx is defined by **PSC\_RX\_SOCKET\_PORT** in pscEpics.h.

#### TCP port for Tx

TCP port for Rx is defined by **PSC\_TX\_SOCKET\_PORT** in pscEpics.h.

## **Firmware version information**

Serial

Fabrication date

Configuration date

## **Appendix: parameter settings for Pizzabox in beamlines.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Beamline** | **Device** | **MAC** | **IP** | **Mask** | **Gateway** | **Rx port** | **Tx port** |
| 07BM | Encoder Pizzabox 1 | 00:0a:35:55:55:60 | 10.7.130.101 | 255.255.0.0 | 10.7.130.254 | 7 | 20 |
| 07BM | Analog Pizzabox 1 | 00:0a:35:55:55:61 | 10.7.130.102 | 255.255.0.0 | 10.7.130.254 |
| 07BM | Analog Pizzabox 2 | 00:0a:35:55:55:62 | 10.7.130.103 | 255.255.0.0 | 10.7.130.254 |