

# Multi Function... Pin Settings

The Multi-Function dialog gives the user access to the configuration settings pertaining to the fault pins on the device. The configuration settings allow users to:

- › Enable or disable pins
- › Map specific faults to external pins
- › Configure how the pins are driven for system compatibility
- › Firmware functions

**For all pins there are some common settings**

## Drive

- Output Buffer type to be use for the pin
- Open Drain: can pull to GND, need an external resistor for pullup
- CMOS: Actively driven output signal

## Polarity

- Logic signal polarity for the pin. Should it be High or Low level when the related signal is active.

The screenshot shows the 'Multi Function - 0x7C' dialog box with the 'Pin Settings' tab selected. The dialog is divided into several sections for configuring different pins:

- MP\_BVRREADY:** Function: Loop B VR\_READY, Polarity: Active High, Drive: Open Drain.
- MP\_FAULT2:** Function: Fault2, Polarity: Active High, Drive: CMOS.
- MP\_IMON:** Function: Loop A lout, Polarity: Active High, Drive: CMOS.
- MP\_BVREN:** Function: Loop B VR\_EN, Polarity: Active High, Drive: Open Drain.
- MP\_FAULT1:** Function: Fault1, Polarity: Active High, Drive: CMOS.
- MP\_PINALERT#:** Function, Polarity, and Drive fields are empty.
- VR\_EN Selection:** Loop A: AVR\_EN, Loop B: MP\_BVREN.
- LPM Output Selection:** Loop A Selected (checked), Loop B Selected (checked).

At the bottom of the dialog are buttons for 'Write', 'Close', and 'Refresh'. A red arrow points from the 'For all pins there are some common settings' text box to the 'Drive' and 'Polarity' settings of the MP\_FAULT2 pin.

# Multi Function... Pin Settings

## MP\_BVRREADY Function

- Function that will be mapped to **MP\_BVRREADY** pin

## MP\_BVREN Function

- Function that will be mapped to **MP\_BVREN** pin

## VR\_EN Selection

- Pin that will be use for VR\_EN function for a specific loop

## MP\_FAULT2 Function

- Function that will be mapped to **MP\_FAULT2** pin

## MP\_FAULT1 Function

- Function that will be mapped to **MP\_FAULT1** pin

## LPM Output Selection

- Low power mode selector that asserts the signal when the selected loop is either disabled or in PS4 active only when LPM is selected for a pin.

## MP\_IMON Function

- Function that will be mapped to **MP\_IMON** pin

## MP\_PINALERT# Function

- Power In alert, Not available for XDPE10281

Multi Function - 0x7C

**Pin Settings** | Fault Signal

**MP\_BVRREADY**

Function: Loop B VR\_READY

Polarity: Active High

Drive: Open Drain

**MP\_FAULT2**

Function: Fault2

Polarity: Active High

Drive: CMOS

**MP\_IMON**

Function: Loop A lout

Polarity: Active High

Drive: CMOS

**MP\_BVREN**

Function: Loop B VR\_EN

Polarity: Active High

Drive: Open Drain

**MP\_FAULT1**

Function: Fault1

Polarity: Active High

Drive: CMOS

**MP\_PINALERT#**

Function:

Polarity:

Drive:

**VR\_EN Selection**

Loop A: AVR\_EN

Loop B: MP\_BVREN

**LPM Output Selection**

☒ Loop A Selected

☒ Loop B Selected

Write Close Refresh

# Multi Function... Fault Signal

## Output Pin

Displays which controller pin the Fault1/2 signal will be routed to

## Loop A/B Selected

Checked: selected fault(s) from the corresponding loop(s) will be routed to the output pin  
 Unchecked: no fault from the loop will be routed to the output pin

## Persistence

Duration of the indicated fault before being cleared  
 Latch: de-asserted by toggling OE, recycling 3.3V or sending CLEAR\_FAULTS  
 Hiccup: de-asserted if fault condition is removed

## Signal Mapping

Selection panel for which fault signals should be reported and masked out to the Fault pin. Multiple Signals can be selected. Signal which is masked out will still appear in the Telemetry/Fault Detail

