

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

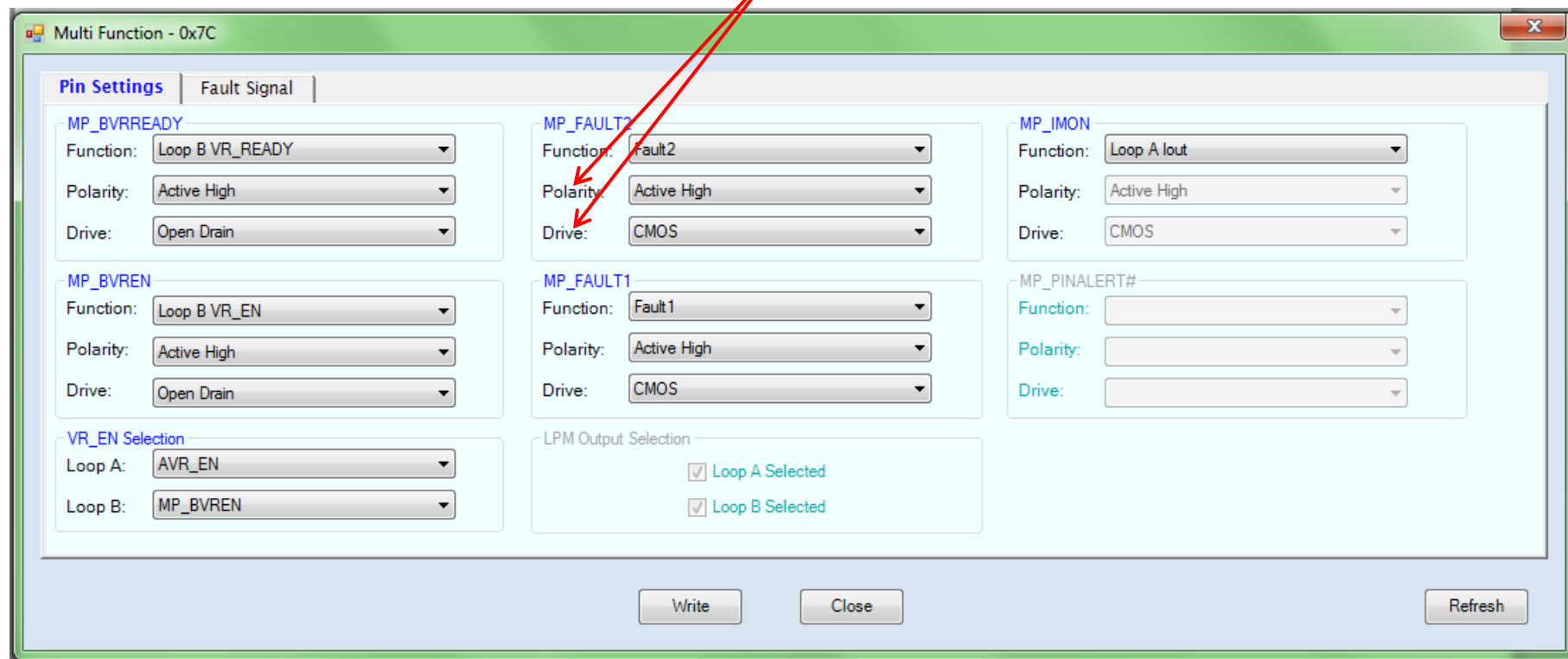
For all pins there are some common settings

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 different pins, each with dropdown menus for Function, Polarity, and Drive. Red arrows point from the text boxes above to the 'Polarity' and 'Drive' settings for the 'MP_FAULT2' pin.

Pin	Function	Polarity	Drive
MP_BVRREADY	Loop B VR_READY	Active High	Open Drain
MP_FAULT2	Fault2	Active High	CMOS
MP_FAULT1	Fault1	Active High	CMOS
MP_IMON	Loop A lout	Active High	CMOS
MP_BVREN	Loop B VR_EN	Active High	Open Drain
MP_PINALERT#			

Additional settings include:

- VR_EN Selection:** Loop A: AVR_EN, Loop B: MP_BVREN
- LPM Output Selection:** ☒ Loop A Selected, ☒ Loop B Selected

Buttons at the bottom: Write, Close, Refresh.

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

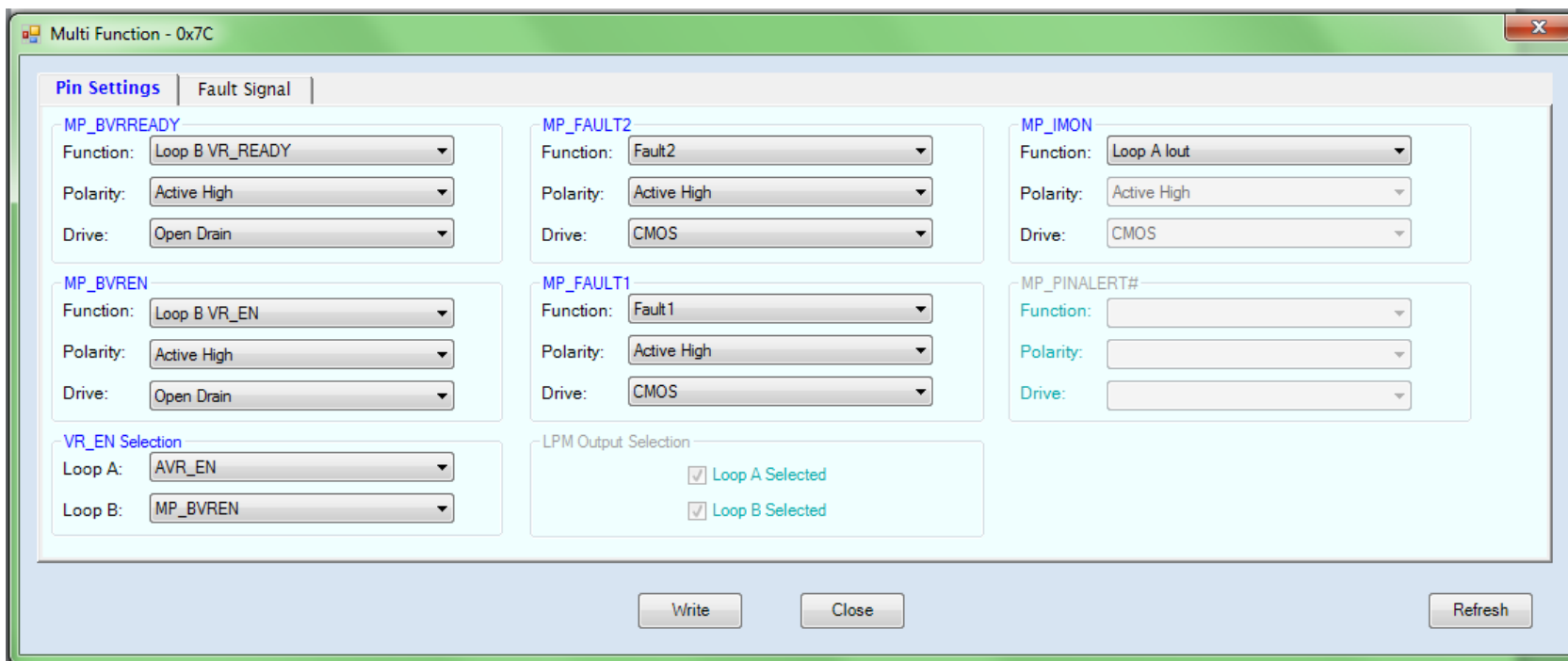
- Low power mode selector that asserts the signal when the selected loop is either disabled or in PS4 active only when LPM is selected for a pin.

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

