**Microchip PolarFire GPIO IND IBIS Model**

* **GPIO Differential**

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| **Ibis File Name** | **Ibis File Rev** | **Date** |
| polarfire\_gpio\_diff.ibs | 2.4 | November 24 2023 |

**Release Notes:**

* Added clamp-off configuration support for LCMDS25,SLVS25,LVDS25,PPDS25,RSDS25,SUBLVDS25 MINILVDS25,HCSL25 receivers
* Added mixed mode receiver support for HSUL18\_33\_ODT-OFF,HSUL18\_25\_ODT-OFF,HSUL18\_15\_ODT-OFF, HSUL18\_12\_ODT-OFF,HSUL18\_ODT-OFF,HSUL18\_ODT-50
* Updated Vinl and Vinh values of HCSL33, HCSL25 receivers

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| **Ibis File Name** | **Ibis File Rev** | **Date** |
| polarfire\_gpio\_diff.ibs | 2.3 | June 20 2023 |

**Release Notes:**

* Added VCM-LOW configuration support for SLVS33, SLVS25, LVDS33, LVDS25, RSDS33, RSDS25, MINILVDS33,MINILVDS25,SUBLVDS33,SUBLVDS25,PPDS33,PPDS25,HCSL33,HCSL25,LVPECL33,LVDS18G receivers
* Updated Vmeas values of LCMDS33, LCMDS25, MIPIE25 drivers
* Updated Vinl and Vinh values of SLVS33, SLVS25 receivers

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| **Ibis File Name** | **Ibis File Rev** | **Date** |
| polarfire\_gpio\_diff.ibs | 2.2 | May 4 2022 |

**Release Notes:**

* Added MPF050 device with RLC package data in [Package] section
* Added RLC package type of FCG784N for MPF300T/TS device
* Update RLC values of 200T-FCVG484 device package data

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| **Ibis File Name** | **Ibis File Rev** | **Date** |
| polarfire\_gpio\_diff.ibs | 2.1 | Sept 6 2021 |

**Release Notes:**

* Added support for LVDS18G driver and receiver
* All LVDS type differential driver models updated to provide stable common mode voltage

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| **Ibis File Name** | **Ibis File Rev** | **Date** |
| polarfire\_gpio\_diff.ibs | 2.0 | Oct 16 2018 |

**Release Notes:**

* Initial Version
* **GPIO Single-ended**

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| **Ibis File Name** | **Ibis File Rev** | **Date** |
| polarfire\_gpio\_se.ibs | 2.3 | November 22 2023 |

**Release Notes**

* Added mixed mode receiver support:
* Input buffers: LVCMOS12\_15\_CL\_ODT-120,LVCMOS12\_18\_CL\_ODT120,LVCMOS12\_25\_CL\_ODT-120,LVCMOS12\_15\_CL\_ODT-240,LVCMOS12\_18\_CL\_ODT-240,LVCMOS12\_25\_CL\_ODT-240,LVCMOS18\_15\_ODT-120,LVCMOS18\_25\_ODT-120,LVCMOS18\_15\_ODT-240,LVCMOS18\_25\_ODT-240,HSUL18\_33\_ODT-OFF,HSUL18\_25\_ODT-OFF,HSUL18\_15\_ODT-OFF,HSUL18\_12\_ODT-OFF,HSUL18\_ODT-OFF,HSUL18\_ODT-50

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| **Ibis File Name** | **Ibis File Rev** | **Date** |
| polarfire\_gpio\_se.ibs | 2.2 | Jul 26 2022 |

**Release Notes:**

* Vmeas\_rising and Vmeas\_falling of pci driver updated for more accuracy.

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| **Ibis File Name** | **Ibis File Rev** | **Date** |
| polarfire\_gpio\_se.ibs | 2.1 | May 4 2022 |

**Release Notes:**

* Vref\_falling max voltage updated for PCI driver
* Added MPF050 device with RLC package data in [Package] section
* Added RLC package type of FCG784N for MPF300T/TS device
* Update RLC values of 200T-FCVG484 device package data

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| **Ibis File Name** | **Ibis File Rev** | **Date** |
| polarfire\_gpio\_se.ibs | 2.0 | Oct 16 2018 |

**Release Notes:**

* Initial Version