Meta Reference Manual

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Meta Functional Description

Epiphany Memory Map

Each Epiphany chip in the Meta system has a unique memory range set through on-board resistors and the ROW/COLUMN coodinate set with dip-switches on the Meta-Carrier. The following table shows the offset of each core within the Meta System. To get the exact absolute address offset for an Epiphany core, add together the address module address, chip address, and core address.

For example, the offset address of core (0,0) in chip (0,2) on module (2,0) would be : 0x80800000

Coordinate	Module	Chip	Core
(0,0)	0x00000000	0x00000000	0x00000000
(0,1)	0x01000000	0x00400000	0x00100000
(0,2)	0x02000000	0x00800000	0x00200000
(0,3)	0x03000000	0x00C00000	0x00300000
(1,0)	0x40000000	0x10000000	0x04000000
(1,1)	0x41000000	0x10400000	0x04100000
(1,2)	0x42000000	0x10800000	0x04200000
(1,3)	0x43000000	0x10C00000	0x04300000
(2,0)	0x80000000	0x20000000	0x08000000
(2,1)	0x81000000	0x20400000	0x08100000
(2,2)	0x82000000	0x20800000	0x08200000
(2,3)	0x83000000	0x20C00000	0x08300000
(3,0)	0xC0000000	0x30000000	0x0C000000
(3,1)	0xC1000000	0x30400000	0x0C100000
(3,2)	0xC2000000	0x30800000	0x0C200000
(3,3)	0xC3000000	0x30C00000	0x0C300000

Table 1: Meta-System Memory Map

Elink Connectors

Each Meta-Module has four Epiphany-elink board to board connectors (north, east, west, south), with each connector supporting four independent bidirectional Epiphany elinks. The Meta-Module connects to the Meta-Carrier as a tightly coupled sandwich.

The Elink connector pinout is shown in the following tables.

Table: South and West Elink Connectors

| Pin # | Signal | Pin # | Signal | Pin # | Signal | Pin # | Signal | |——-|———|——-|———|——-|———|——-|———|

Control Connector

The reset and clocking signals for the Meta-Module is provided by the Meta-Carrier through the control connector.

Meta Warranty/Disclaimers

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