Parallella-64 Prototype System

Memory Map

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1. Parallella-64 SDK Memory Map

Table 1 shows the default memory map of the Parallella-64 Epiphany subsystem. The SDK Debug port number is used to connect to the correct TCP/IP port on the e-server from the e-gdb debug client using the procedure specified in the Epiphany SDK Reference document's debugger chapter.

Table 1: Memory Map for Parallella-64

Core Number	Start Address	End Address	Size	Epiphany SDK Debug Port Number
(32, 8)	80800000	80807FFF	32KB	51000
(32, 9)	80900000	80907FFF	32KB	51001
(32,10)	80A00000	80A07FFF	32KB	51002
(32,11)	80B00000	80B07FFF	32KB	51003
(32,12)	80C00000	80C07FFF	32KB	51004
(32,13)	80D00000	80D07FFF	32KB	51005
(32,14)	80E00000	80E07FFF	32KB	51006
(32,15)	80F00000	80F07FFF	32KB	51007
(33, 8)	84800000	84807FFF	32KB	51008
(33, 9)	84900000	84907FFF	32KB	51009
(33,10)	84A00000	84A07FFF	32KB	51010
(33,11)	84B00000	84B07FFF	32KB	51011
(33,12)	84C00000	84C07FFF	32KB	51012
(33,13)	84D00000	84D07FFF	32KB	51013
(33,14)	84E00000	84E07FFF	32KB	51014
(33,15)	84F00000	84F07FFF	32KB	51015
(34, 8)	88800000	88807FFF	32KB	51016
(34, 9)	88900000	88907FFF	32KB	51017
(34,10)	88A00000	88A07FFF	32KB	51018
(34,11)	88B00000	88B07FFF	32KB	51019
(34,12)	88C00000	88C07FFF	32KB	51020
(34,13)	88D00000	88D07FFF	32KB	51021
(34,14)	88E00000	88E07FFF	32KB	51022
(34,15)	88F00000	88F07FFF	32KB	51023
(35, 8)	8C800000	8C807FFF	32KB	51024
(35, 9)	8C900000	8C907FFF	32KB	51025

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(35,10)	8CA00000	8CA07FFF	32KB	51026
(35,11)	8CB00000	8CB07FFF	32KB	51027
(35,12)	8CC00000	8CC07FFF	32KB	51028
(35,13)	8CD00000	8CD07FFF	32KB	51029
(35,14)	8CE00000	8CE07FFF	32KB	51030
(35,15)	8CF00000	8CF07FFF	32KB	51031
(36, 8)	90800000	90807FFF	32KB	51032
(36, 9)	90900000	90907FFF	32KB	51033
(36,10)	90A00000	90A07FFF	32KB	51034
(36,11)	90B00000	90B07FFF	32KB	51035
(36,12)	90C00000	90C07FFF	32KB	51036
(36,13)	90D00000	90D07FFF	32KB	51037
(36,14)	90E00000	90E07FFF	32KB	51038
(36,15)	90F00000	90F07FFF	32KB	51039
(37, 8)	94800000	94807FFF	32KB	51040
(37, 9)	94900000	94907FFF	32KB	51041
(37,10)	94A00000	94A07FFF	32KB	51042
(37,11)	94B00000	94B07FFF	32KB	51043
(37,12)	94C00000	94C07FFF	32KB	51044
(37,13)	94D00000	94D07FFF	32KB	51045
(37,14)	94E00000	94E07FFF	32KB	51046
(37,15)	94F00000	94F07FFF	32KB	51047
(38, 8)	98800000	98807FFF	32KB	51048
(38, 9)	98900000	98907FFF	32KB	51049
(38,10)	98A00000	98A07FFF	32KB	51050
(38,11)	98B00000	98B07FFF	32KB	51051
(38,12)	98C00000	98C07FFF	32KB	51052
(38,13)	98D00000	98D07FFF	32KB	51053
(38,14)	98E00000	98E07FFF	32KB	51054
(38,15)	98F00000	98F07FFF	32KB	51055
(39, 8)	9C800000	9C807FFF	32KB	51056
(39, 9)	9C900000	9C907FFF	32KB	51057
(39,10)	9CA00000	9CA07FFF	32KB	51058
(39,11)	9CB00000	9CB07FFF	32KB	51059
(39,12)	9CC00000	9CC07FFF	32KB	51060

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(39,13)	9CD00000	9CD07FFF	32KB	51061
(39,14)	9CE00000	9CE07FFF	32KB	51062
(39,15)	9CF00000	9CF07FFF	32KB	51063
DRAM (host)	1E000000	1FFFFFFF	32MB	n/a
DRAM (device)	8E000000	8FFFFFFF	32MB	n/a

(*) The physical DRAM range is `0x1e000000÷0x1fffffff`. This ranged is aliased to `0x8e000000÷0x8fffffff` as seen from the Epiphany subsystem side.

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