



Parallella-16 Prototype System

Memory Map

Rev 4.13.03.30



Copyright © 2008-2013 Adapteva Inc.

All rights reserved.

Adapteva, the Adapteva Logo, Epiphany[™], eCore[™], eMesh[™], eLink[™], eHost[™], and eLib[™] are trademarks of Adapteva Inc. All other products or services mentioned herein may be trademarks of their respective owners.

The product described in this document is subject to continuous developments and improvements. All particulars of the product and its use contained in this document are given by Adapteva Inc. in good faith. For brevity purposes, Adapteva is used in place of Adapteva Inc. in below statements.

1. Subject to the provisions set out below, Adapteva hereby grants to you a perpetual, non-exclusive, nontransferable, royalty free, worldwide license to use this Reference Manual for the purposes of developing; (i) software applications or operating systems which are targeted to run on microprocessor chips and/or cores distributed under license from Adapteva; (ii) tools which are designed to develop software programs which are targeted to run on microprocessor cores distributed under license from Adapteva; (iii) or having developed integrated circuits which incorporate a microprocessor core manufactured under license from Adapteva.

2. Except as expressly licensed in Clause 1 you acquire no right, title or interest in the Reference Manual, or any Intellectual Property therein. In no event shall the licenses granted in Clause 1, be construed as granting you expressly or by implication, estoppel or otherwise, licenses to any Adapteva technology other than the Reference Manual. The license grant in Clause 1 expressly excludes any rights for you to use or take into use any Adapteva patents. No right is granted to you under the provisions of Clause 1 to; (i) use the Reference Manual for the purposes of developing or having developed microprocessor cores or models thereof which are compatible in whole or part with either or both the instructions or programmer's models described in this Reference Manual; or (ii) develop or have developed models of any microprocessor cores designed by or for Adapteva; or (iii) distribute in whole or in part this Reference Manual to third parties, other than to your subcontractors for the purposes of having developed products in accordance with the license grant in Clause 1 without the express written permission of Adapteva; or (iv) translate or have translated this Reference Manual into any other languages.

3. THE "REFERENCE MANUAL" IS PROVIDED "AS IS" WITH NO WARRANTIES EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF SATISFACTORY QUALITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE.

4. No license, express, implied or otherwise, is granted to LICENSEE, under the provisions of Clause 1, to use the Adapteva trade name, in connection with the use of the Reference Manual; or any products based thereon. Nothing in Clause 1 shall be construed as authority for you to make any representations on behalf of Adapteva in respect of the Reference Manual or any products based thereon.

Adapteva Inc.
1666 Massachusetts Ave, Suite 14
Lexington, MA 02420
USA

1. Parallella-16 SDK Memory Map

Table 1 shows the default memory map of the Parallella-16 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-16

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
(33, 8)	84800000	84807FFF	32KB	51004
(33, 9)	84900000	84907FFF	32KB	51005
(33,10)	84A00000	84A07FFF	32KB	51006
(33,11)	84B00000	84B07FFF	32KB	51007
(34, 8)	88800000	88807FFF	32KB	51008
(34, 9)	88900000	88907FFF	32KB	51009
(34,10)	88A00000	88A07FFF	32KB	51010
(34,11)	88B00000	88B07FFF	32KB	51011
(35, 8)	8C800000	8C807FFF	32KB	51012
(35, 9)	8C900000	8C907FFF	32KB	51013
(35,10)	8CA00000	8CA07FFF	32KB	51014
(35,11)	8CB00000	8CB07FFF	32KB	51015
DRAM (host)	1E000000	1FFFFFFFFF	32MB	n/a
DRAM (device)	8E000000	8FFFFFFFFF	32MB	n/a

(*) The physical DRAM range is `0x1e000000÷0x1fffffffff`. This ranged is aliased to `0x8e000000÷0x8fffffffff` as seen from the Epiphany subsystem side.