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VESA[®]

VUMA Proposal

(Draft)

Video Electronics Standards Association

2150 North First Street, Suite 440
San Jose, CA 95131-2029

Phone: (408) 435-0333
FAX: (408) 435-8225

**VESA Unified Memory Architecture
Hardware Specifications Proposal**

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Purpose

To enable core logic chipset and VUMA device designers to design VUMA devices supporting the Unified Memory Architecture.

Summary

This document contains a specification for VUMA devices' hardware interface. It includes logical and electrical interface specifications. The BIOS protocol is described in VESA document VUMA VESA BIOS Extensions (VUMA-SBE) rev. 1.0.

Scope

Because this is a draft document, it cannot be considered complete or accurate in all respects although every effort has been made to minimize errors.

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(The following list is the preferred order for contacting VESA.)

VESA World Wide Web Page: www.vesa.org
Fax: (408) 435-8225
Mail: VESA
2150 North First Street
Suite 440
San Jose, California 95131-2029

Acknowledgments

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Work Group Members

Any industry standard requires information from many sources. The following list recognizes members of the VUMA Committee, which was responsible for combining all of the industry input into this proposal.

Chairperson

Rajesh Shakkarwar OPTi

Members

Jonathan Claman	S3
Jim Jirgal	VLSI Technology Inc.
Don Pannell	Sierra Semiconductor
Wallace Kou	Western Digital
Derek Johnson	Cypress
Andy Daniel	Alliance Semiconductor
Long Nguyen	Oak Technology
Robert Tsay	Pacific Micro Computing Inc.
Sunil Bhatia	Mentor Arc
Peter Cheng	Samsung
Alan Mormann	Micron
Solomon Alemayehu	Hitachi America Ltd.
Larry Alchesky	Mitsubishi
Dean Hays	Weitek

Revision History

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Revision 0.2p Added sync DRAM support Electrical Section Boot Protocol Reformatted document	Oct 5 '95
Revision 0.3p Graphics controller replaced with VUMA device MD[n:0] changed to t/s Modified Aux Memory description Added third solution to Memory Expansion Problem Synch DRAM burst length changed to 2/4 Modified all the bus hand off diagrams Added DRAM Driver Characteristics section	Oct 19 '95
Revision 0.4p Sync DRAM Burst Length changed to 1/2/4 DRAM controller pin multiplexing added Changed AC timing parameters	Oct 19 '95

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