



Calypso 32 User Manual

Document No. 80-16538 Issue 6

Current Issue :- Issue 6, 10 July 2008

Previous Issues :- Issue 5, 5 May 2005

© Heber Ltd. 2008. This document and the information contained therein is the intellectual property of Heber Ltd. and must not be disclosed to a third party without consent. Copies may be made only if they are in full and unmodified.

If your query is not covered in this User Manual, or you require further information, please email Heber Customer Support: support@heber.co.uk

The latest version of this User Manual and other technical information can be found on the Heber website: www.heber.co.uk

Copyright © Heber Ltd. 2008. All rights reserved. This document and the information contained therein is the intellectual property of Heber Ltd. and must not be disclosed to a third party without consent. Copies may be made only if they are in full and unmodified.

The information contained in this User Manual is believed to be accurate and reliable. However, Heber Ltd. assumes no responsibility for its use, and reserves the right to revise the documentation without notice.

Precise specifications may change without prior notice.

All trademarks are acknowledged.

HEBER LIMITED
Belvedere Mill
Chalford Stroud
GL6 8NT
UK

Tel +44 (0) 1453 886000
Fax +44 (0) 1453 885013
Email support@heber.co.uk
Website www.heber.co.uk

CONTENTS

1	OVERVIEW	1
1.1	USING CALYPSO 32 WITH PLUTO 6	1
2	SPECIFICATION	1
2.1	CAPABILITIES	1
2.2	MECHANICAL DIMENSIONS.....	1
2.3	POWER SUPPLY REQUIREMENTS.....	1
2.4	SUMMARY OF CONNECTORS	2
3	INSTALLING A CALYPSO 32 CARD	2

LIST OF FIGURES

Figure 1 - Mechanical Layout	3
Figure 2 - Photograph of Calypso 32	4

This page intentionally left blank.

1 OVERVIEW

This document contains the specification and installation instructions for the **Pluto 6 Calypso 32 Video Card**. Calypso 32 is a graphics display controller designed specifically for use with the Pluto 6 board. Calypso 32 is designed around the Fujitsu Cremson MB86290A graphics processor and has 32MBytes of video memory.

1.1 Using Calypso 32 with Pluto 6

Pluto 6 boards with the PCB part number, 56-16310-X (printed on the back of the PCB) can be used with a single Calypso 32 card.

Pluto 6 boards with the PCB part number, 56-17800-X (printed on the back of the PCB) can be used with one or two Calypso 32 cards. When two Calypso 32 cards are used, Pluto 6 provides dual video. When using Pluto 6 for dual video, the Calypso 32 card must be issue 7 or higher. The issue number of the Calypso 32 card is printed on the back of the card, together with the PCB part number (for example, 56-16392-7, where 7 is the issue number).

Further information can be found in the **PLUTO 6 USER MANUAL** (Heber part no. 80-16322) and in the **PLUTO 6 SOFTWARE HELP FILE** (Heber part no. 80-17314).

2 SPECIFICATION

The **Calypso 32 Video Card** specification is described in the following sections. This specification may be subject to change without notification.

2.1 Capabilities

The standard capabilities of the **Pluto 6 Calypso 32 Video Card**, include the following features:

Feature	Calypso 32 Video Card
Video Controller	<ul style="list-style-type: none"> • Up to 1024 x 768 resolution @ 16bits/pixel • 2D drawing functions - point, triangle, polygon, BLT and pattern drawing • 4 Layers of overlay display
Video Memory	32Mbytes of SDRAM Memory
Host Interface	Pluto 6 expansion connectors with electrical connections to the VGA connector on the Pluto 6 board.

The Fujitsu Cremson Graphics Controller supports various 3D drawing functions, including anti-aliasing, Gouraud shading, texture mapping and tiling. However, these features are not currently implemented in the Heber supplied software drivers.

2.2 Mechanical Dimensions

The **Pluto 6 Calypso 32 Video Card** is manufactured as a 6 layer PCB assembly of dimensions 47mm x 133.35mm x 1.2mm (1.85" x 5.25" x 0.047").

2.3 Power Supply Requirements

The **Pluto 6 Calypso 32 Video Card** does not require any external power connections. The card is bus powered from the Pluto 6 expansion connectors.

2.4 Summary of Connectors

IDENT	CONNECTOR TYPE	LABEL	DESCRIPTION
P1	168W PCB Edge Connector	EXP1	DIMM Edge Connector

3 INSTALLING A CALYPSO 32 CARD

There are two expansion DIMM sockets labelled EXP 0 or EXP 1 on a Pluto 6 board. If using a single Calypso 32 video expansion card, this must be fitted into the DIMM socket labelled EXP 0.

If using Pluto 6 with dual video capabilities, two Calypso 32 expansion cards should be fitted into the DIMM sockets labelled EXP 0 or EXP 1.

CAUTION: Static electricity can damage the electronic components of Pluto 6 or Calypso 32 systems. Before beginning this procedure, you should touch an earthed metal object to ensure that you are discharged of static electricity.

To install Calypso 32:

1. Turn off the power supply to the Pluto 6 system. Remove the power supply connector from the connector marked P18 on the Pluto 6 PCB.
2. Locate the DIMM socket labelled EXP 0 on the Pluto 6 board. Push the latches out and carefully insert the Calypso 32 card into the DIMM sockets (step 1). Two notches on the DIMM socket ensure that the Calypso 32 card can only be inserted one way. Push down vertically so that the Calypso 32 card is properly seated in the socket.
3. Make sure the plastic latches fit over the edge of the Calypso 32 card to hold it securely in place in the closed position (step 2).
4. If a second Calypso 32 card is being fitted, repeat steps 2 and 3, and fit the second Calypso 32 card into the DIMM socket labelled EXP 1.

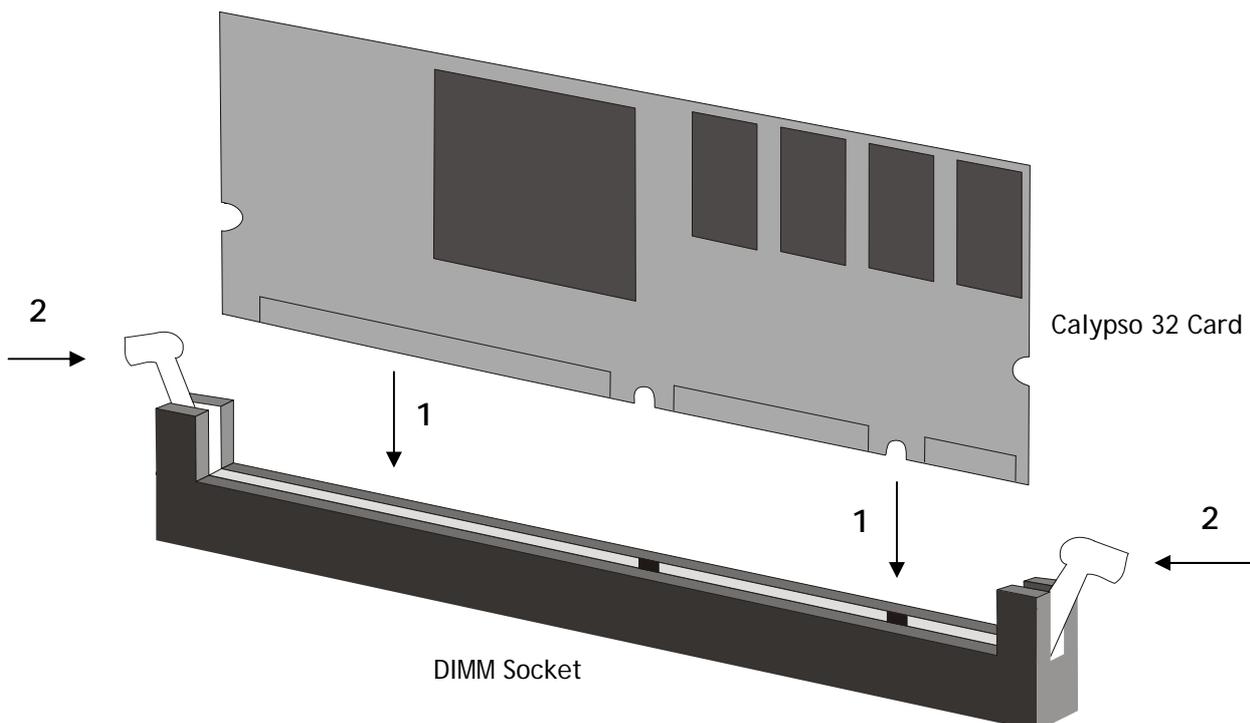


Figure 1 - Mechanical Layout

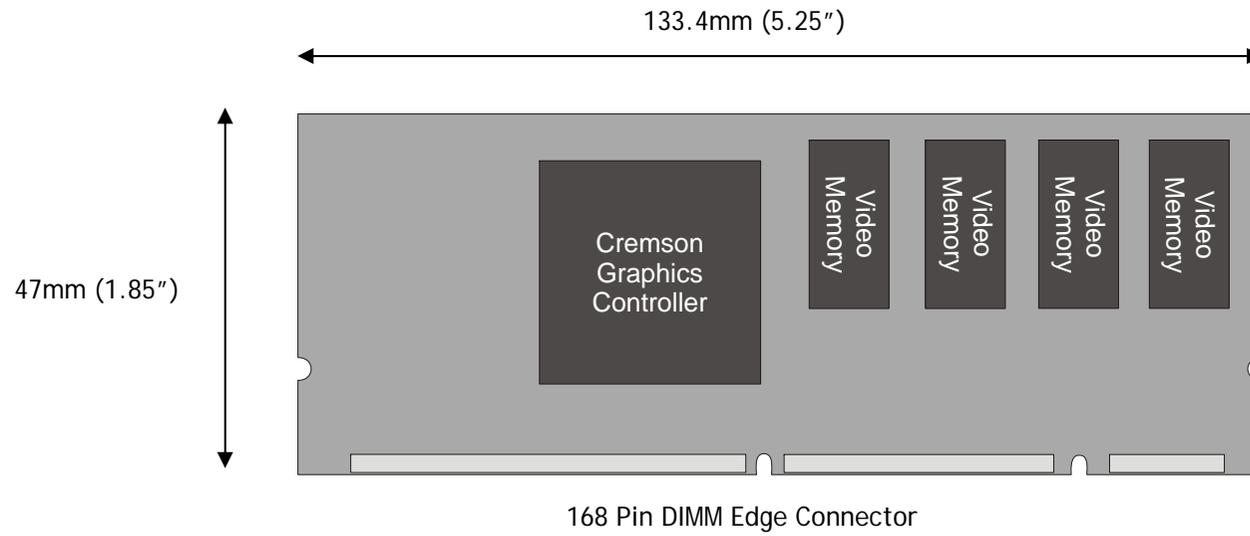


Figure 2 - Photograph of Calypso 32

NOTE: This photograph may differ from the stated specification.

