



## MiniPCI-VGA-Z9s

### MiniPCI VGA / LVDS Module

## User's Manual

(Revision 1.0A)

## • Copyright

The information in this manual is subject to change without notice for continuous improvement in the product. All rights are reserved. The manufacturer assumes no responsibility for any inaccuracies that may be contained in this document. And makes no commitment to update or to keep current the information contained in this manual.

No part of this manual may be reproduced, copied, translated or transmitted, in whole or in part, in any form or by any means without the prior written permission of the DMP Electronics Inc.

©Copyright 2008 DMP Electronics Inc.

Manual No. IUMMiniPCI-VGA-Z9s000-01 Ver.1.0A • September, 2008

## • Trademarks Acknowledgment

Other brand names or product names appearing in this document are the properties and registered trademarks of their respective owners. All names mentioned herewith are served for identification purpose only.

# Table of Contents

Table of Contents .....	iii
Chapter 1 Introduction.....	1
1.1 Packing List.....	1
1.2 Specifications .....	2
1.3 Board Dimension.....	3
Chapter 2 Installation.....	4
2.1 Board Outline .....	4
2.2 Connectors & Jumpers Summary.....	5
2.3 Pin Assignments & Jumper Settings.....	6
Chapter 3 Driver Installation.....	7
Appendix .....	8
A. LVDS Flat Panel Support List.....	8
B. Flat Panel Hardware Setting .....	9
Warranty.....	10

This page is blank



# Chapter 1

## Introduction

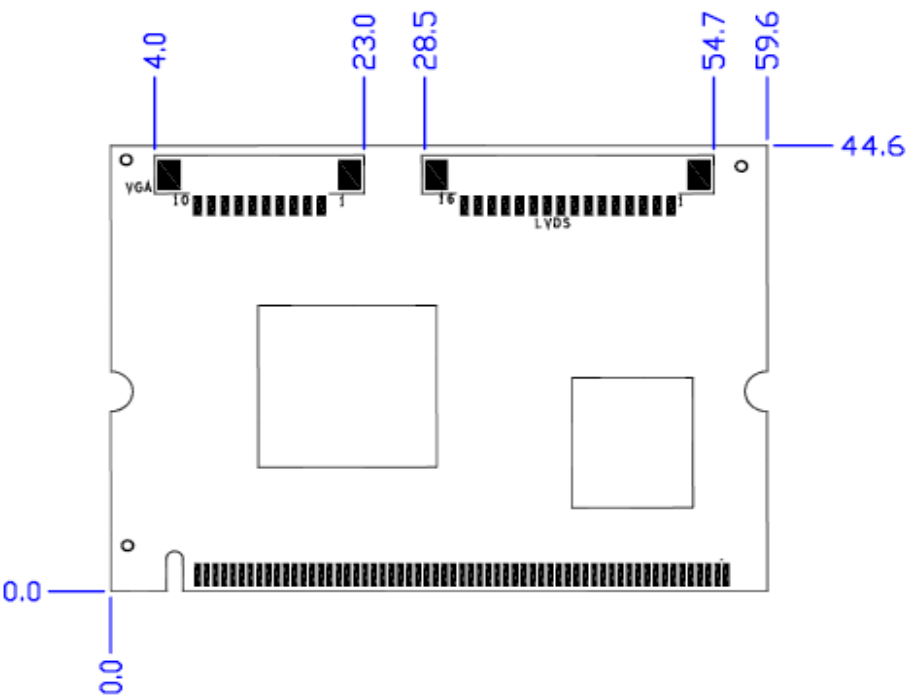
### 1.1 Packing List

Product Name	Package
MiniPCI-VGA-Z9s	<ul style="list-style-type: none"><li>● MiniPCI-VGA-Z9s VGA / LCD module x1</li><li>● CABLE-MINIPCI-L-30CM x 1</li></ul>

## 1.2 Specifications

Features	MiniPCI-VGA-Z9s
Chipset	Volari Z9s Chipset 32-bit PCI bus Support 12-bit, 18-bit, and dual 12-bit Digital Interface Support VGA, LVDS 18 bits Flat Panel Display
BIOS	VGA BIOS
Video Memory	Onboard 32MB DDRII Resolution up to 1600x1200@16M colors
Bus Interface	Mini-PCI standard compliant
Connectors	 1.25mm 10-pin wafer for VGA x1  1.25mm 16-pin wafer for LVDS x1
Power Requirement	Single Voltage +5V @80mA
Dimension	64.7mm X 44.6mm (2.54 x1.76 inches)
Weight	9g
Operating Temperature	-20°C ~ +70°C -40°C ~ +85°C (Optional)

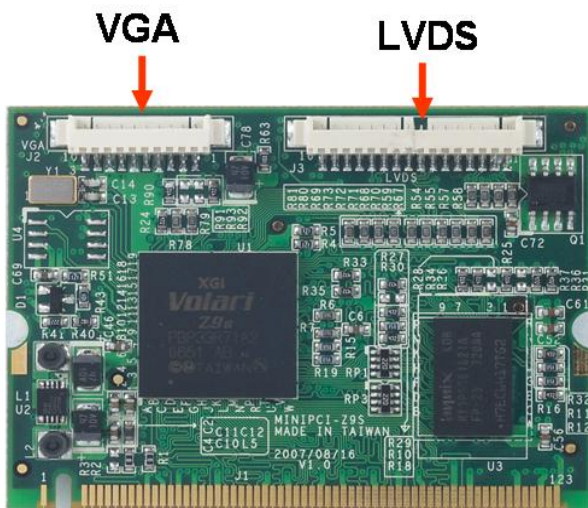
# 1.3 Board Dimension



# Chapter 2

## Installation

### 2.1 Board Outline





## 2.2 Connectors & Jumpers Summary

Summary Table			
Nbr	Description	Type of Connections	Pin nbrs.
J1	MINI-PCI TYPE-III	MINI-PCI TYPE-III interface	124-pin
J2	VGA	Wafer, 1.25Ø , 10x1	10-pin
J3	LVDS	Wafer, 1.25Ø , 16x1	16-pin

## 2.3 Pin Assignments & Jumper Settings

### J2: VGA

Pin #	Signal Name	Pin #	Signal Name
1	ROUT	2	GND
3	GOUT	4	GND
5	BOUT	6	GND
7	HSYNC	8	GND
9	VSYNC	10	GND

### J3: LVDS

Pin #	Signal Name	Pin #	Signal Name
1	VDD3 (3.3V)	2	VDD3 (3.3V)
3	RxIN0+	4	RxIN0-
5	GND	6	GND
7	RxIN1+	8	RxIN1-
9	GND	10	GND
11	RxIN2+	12	RxIN2-
13	GND	14	GND
15	CKIN+	16	CKIN-

# C h a p t e r 3

## Driver Installation

**Mini-PCI-VGA-Z9s** use Display chip “Volari™ Z9s” which is an ultra low powered graphics chipset with total power consumption at around 1-1.5 W. It is capable in providing VGA display output upto 1600x1200. With DVO interface, developers could easily connect flat Panel to support TFT and LVDS output.

For more information about “Volari™ Z9s” Driver, this can be downloaded from:

[http://www.xgitech.com/sd/sd\\_download.asp](http://www.xgitech.com/sd/sd_download.asp)

# Appendix

## A. LVDS Flat Panel Support List

Size	Brand	Resolution	Model No.
3.5"	PVI	640x480	PD035VL1
6.5"	AUO	640x480	G065VN01
8.4"	AUO	800x600	G084SN03
10.4"	MITSUBISHI	800x600	AA104SG01
10.4"	AUO	800x600	G104SN02
10.4"	Sharp	800x600	LQ104S1LG61
12.1"	MITSUBISHI	800x600	AA121SL03
12.1"	AUO	800x600	G121SN01

## B. Flat Panel Wiring and Lighting

### ■ Hardware

Before you connect the LVDS LCD Flat Panel with Mini-PCI-VGA-Z9s, please make sure that the input Voltage of LVDS LCD is 3.3V or Not

### ■ BIOS

Please contact or e-mail our regional sales to get the special BIOS for the any LVDS LCD Flat Panels.

### ■ Wiring LCD Cable

Please refer to [Page 6](#) ([J3: LVDS connector](#)), Or for more LCD lighting and integration service, please contact our regional sales or mail to [info@icop.com.tw](mailto:info@icop.com.tw) , if you have any questions.

## Warranty

This product is warranted to be in good working order for a period of one year from the date of purchase. Should this product fail to be in good working order at any time during this period, we will, at our option, replace or repair it at no additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster. Vendor assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, originality to use this product. Vendor will not be liable for any claim made by any other related party. Return authorization must be obtained from the vendor before returned merchandise will be accepted. Authorization can be obtained by calling or faxing the vendor and requesting a Return Merchandise Authorization (RMA) number. Returned goods should always be accompanied by a clear problem description.