OPERATIONS MANUAL
PCM-WW

NOTE: *This manual has been designed and created for use as part of the WinSystems' Technical Manuals CD and/or the WinSystems' website. If this manual or any portion of the manual is downloaded, copied or emailed, the links to additional information (i.e. software, cable drawings) will be inoperable.*

REVISION HISTORY
P/N 403-0174-000

ECO Number	Date Code	Rev Level
ORIGINATED	930416	A

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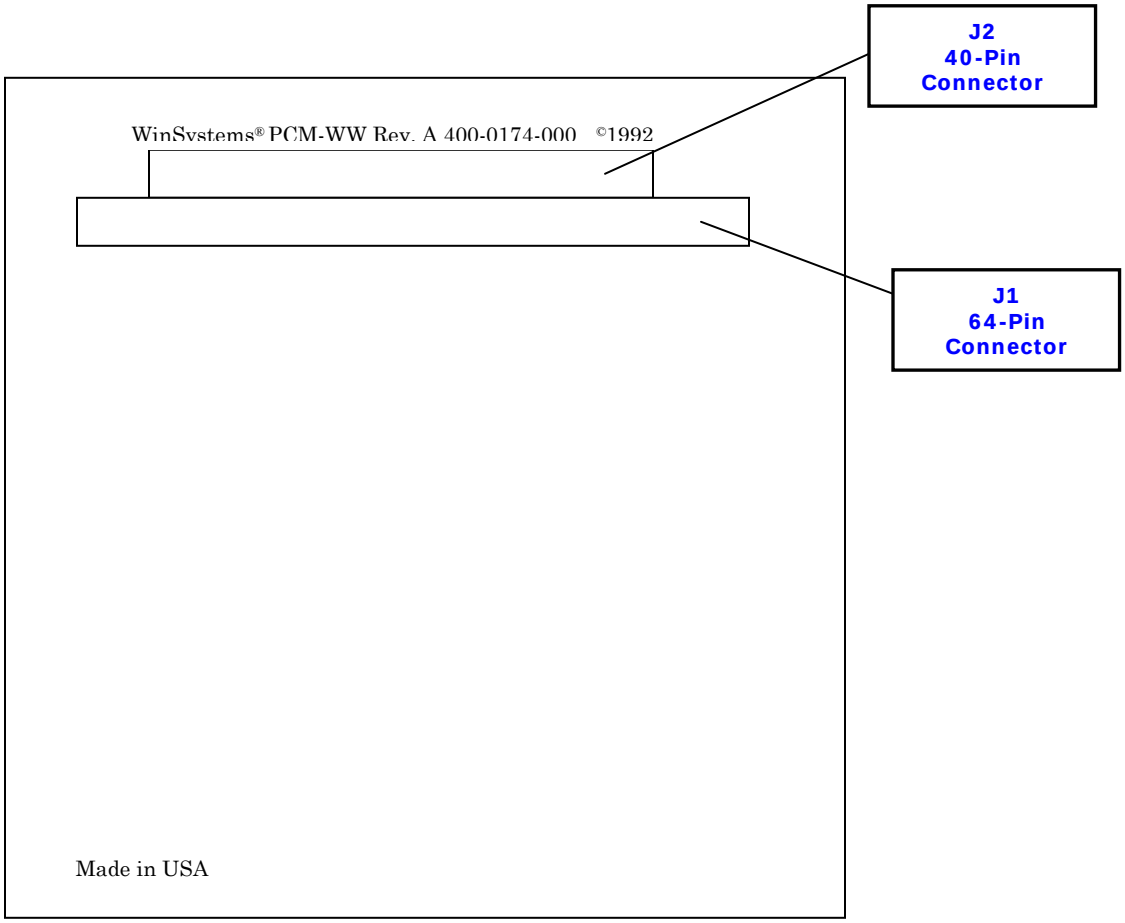
Visual Index – Quick Reference

For the convenience of the user, a copy of the Visual Index has been provided with direct links to connector and jumper configuration data.



Introduction

This manual is intended to provide the necessary information regarding configuration and usage of the EPX-GX500 board. WinSystems maintains a Technical Support Group to help answer questions regarding usage, or programming of the board. For answers to questions not adequately addressed in this manual, contact Technical Support at (817) 274-7553 between 8AM and 5PM Central Time.

General Information

Features

- Permits addition of user-designer circuitry for PC/104 systems
- 8-bit or 16-bit versions
- Access to all PC/104 lines and power buses
- 8Mbyte to 288Mbyte capacity
- Wire-wrap or point-to-point wiring supported
- Large breadboard area on 0.100” grid accepts standard DIP sockets, connectors and press-fit pins
- Plated-through holes
- Provisions for bypass capacitors
- Non-stackthrough connector

General Information

The PCM-WW is designed as a universal prototyping card for user application-specific circuitry. It allows PC/104 users to construct experimental and custom I/O interfaces with a minimum effort. An inch grid is provided for the breadboard area that accepts standard DIP sockets, connectors, press-fit pins and discrete logic circuitry.

Functional Capability

Bus Interface

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Full access is provided to the PC/104 connector including address bus, data bus, control and power. A ground bus rings the board edge. Connection points are provided from the bus to the prototyping circuit area.

The board is designed to be placed at the top of the PC/104 module stack and will plug directly into the socket of an adjacent card.

Both 8-bit and 16-bit prototyping modules are available which are designated an PCM-WW8 and PCM-WW16 respectively. The PCM-WW8 contains a single 64-pin connector for use with 8-bit systems. The PCM-WW16 has both the 64-pin connector and a 40-pin connector for use with the 16-bit PC/AT Bus implementations.

64-Pin Connector

IOCHK*	A1 o o B1	GND
SD7	A2 o o B2	RESET
SD6	A3 o o B3	+5V
SD5	A4 o o B4	IRQ2
SD4	A5 o o B5	-5V
SD3	A6 o o B6	DRQ2
SD2	A7 o o B7	-12V
SD1	A8 o o B8	OWS
SD0	A9 o o B9	+12V
IOCHRDY	A10 o o B10	GND
AEN	A11 o o B11	SMEMW*
SA19	A12 o o B12	SMEMR*
SA18	A13 o o B13	IOWR*
SA17	A14 o o B14	IORD*
SA16	A15 o o B15	DACK3*
SA15	A16 o o B16	DRQ3
SA14	A17 o o B17	DACK1*
SA13	A18 o o B18	DRQ1
SA12	A19 o o B19	DACK0
SA11	A20 o o B20	CLK
SA10	A21 o o B21	IRQ7
SA9	A22 o o B22	IRQ6
SA8	A23 o o B23	IRQ5
SA7	A24 o o B24	IRQ4
SA6	A25 o o B25	IRQ3
SA5	A26 o o B26	DACK2*
SA4	A27 o o B27	TC
SA3	A28 o o B28	ALE
SA2	A29 o o B29	+5V
SA1	A30 o o B30	OSC
SA0	A31 o o B31	GND
GND	A32 o o B32	GND

40-Pin Connector

GND	D0 o o C0	GND
MEMCS16*	D1 o o C1	BHE*
IOCS16*	D2 o o C2	LA23
IRQ10	D3 o o C3	LA22
IRQ11	D4 o o C4	LA21
IRQ12	D5 o o C5	LA20
IRQ15	D6 o o C6	LA19
IRQ14	D7 o o C7	LA18
DACK0*	D8 o o C8	LA17
DRQ0	D9 o o C9	MEMR*
DACK5*	D10 o o C10	MEMW*
DRQ5	D11 o o C11	SD8
DACK6*	D12 o o C12	SD9
DRQ6	D13 o o C13	SD10
DACK7*	D14 o o C14	SD11
DRQ7	D15 o o C15	SD12
+5V	D16 o o C16	SD13
MASTER*	D17 o o C17	SD14
GND	D18 o o C18	SD15
GND	D19 o o C19	KEY

Configuration

A 3.125 x 3.25 inch prototyping breadboard area is available for application-specific prototype and experimental circuit design. It consists of a 0.100 inch grid of 0.038 inch plated through holes that will accept 0.025 inch square posts, discrete components, standard 8-, 14-, 16-, 24-, 28-, and 40-pin solder or wirewrap DIP sockets and connectors. The card permits installation of one or several 0.100" right angle connectors or headers at the edge.

Two 0.6 inch spaces and its corresponding screws are shipped with each module.

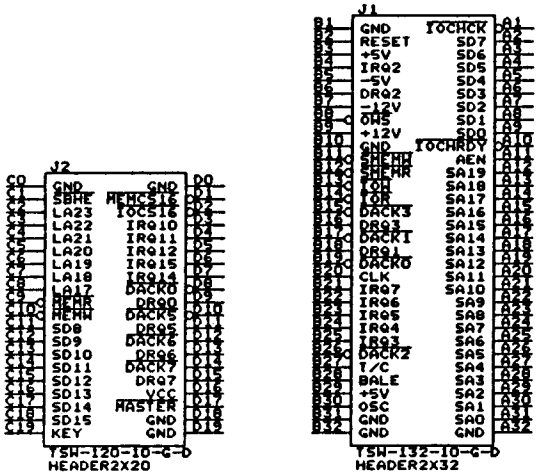
Specifications

Mechanical

Dimensions : 3.6” X 3.8” (90mm x 96mm)
PC Board : FR4 Epoxy Glass with plated through holes on a 0.100” grid
Connectors (non-stackthrough)
PCM-WW8 : 32-pin double row, 0.025” square posts
PCM-WW16 : 32-pin double row, 0.025” square posts
20-pin double row, 0.025” square posts
Weight : 1.60 ozs

APPENDIX A

PCM-WW Schematic Diagram



NOTE: CONNECTIONS ARE MADE TO THE BUS BY WIRE-WRAPPING THE PINS EXPOSED ON THE TOPS OF THE CONNECTORS
THE REST OF THE BOARD IS A 0.100" GRID OF 60x38 PADSxHOLES.

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JRK

PCM-WW PC104 WIRE WRAP BOARD

SIZE	FSCM NO	DWG NO	REV
B		401-0174-000	A

December 11, 1992

SCALE

SHEET 1 OF 1

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