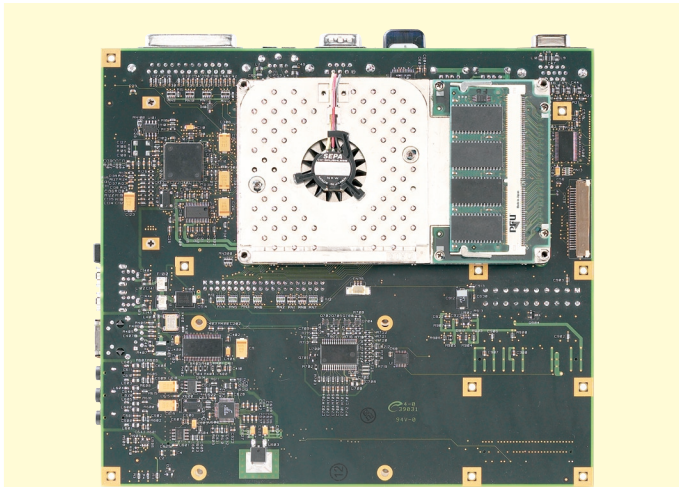
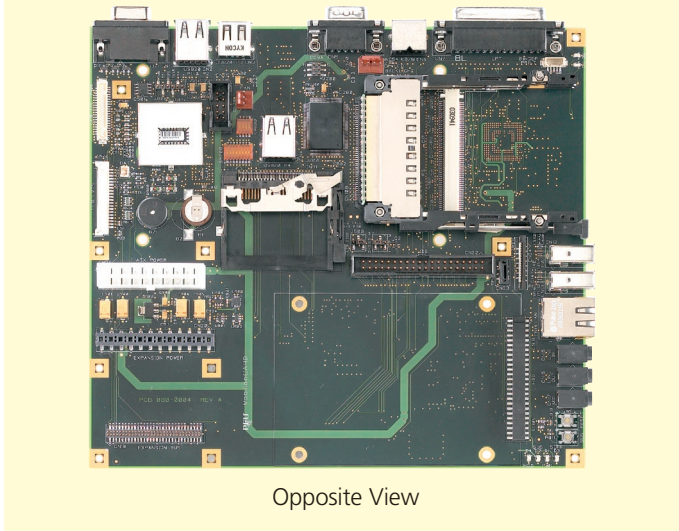


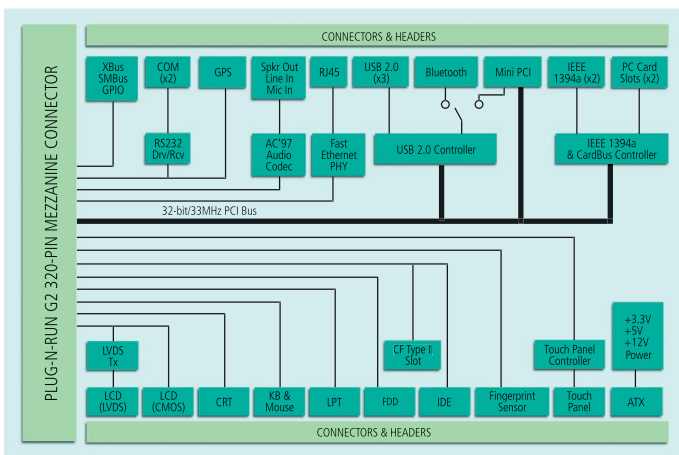
Plug-N-Run™ G2 Carrier Board



MobilonCARD shown with 933MHz Plug-N-Run G2 Module



Opposite View



Block Diagram

Applications:

- Industrial automation
- Medical
- Transportation
- Defense
- Test & measurement
- Retail

Description:

PFU Systems' MobilonCARD is a carrier board reference design for tablet-based embedded computing solutions. It uses PFU Systems' Plug-N-Run G2 System-on-Modules for embedded x86 host functionality. The combination of a Plug-N-Run G2 module and a MobilonCARD carrier board yields an ultra-compact, portable, low power, yet powerful embedded system, capable of wireless communication, location awareness, biometric security and the capture and manipulation of high resolution images.

The MobilonCARD carrier board is a complete system board with GPS, Bluetooth™, Biometric Fingerprint Sensor, and Touch Screen capabilities. This makes it an excellent rapid prototyping platform for tablet-based solutions such as, forklift-mounted computers, portable ultrasound systems, mobile fleet-management computers, portable robotic-control systems and portable testers and analyzers.

The Mini PCI socket and PC Card slots provide flexible expansion capabilities. The USB 2.0 and IEEE 1394a ports allow connectivity to industry standard high-speed peripherals. A mezzanine expansion interface provides the flexibility to add smart-battery or vehicle-power interface electronics, as well as GPIO driven interfaces.

A CompactFlash® Type II socket provides connectivity to removable solid-state storage devices for software upgrades and system recovery. The Ethernet PHY configured for use with the Fast Ethernet MDI and PXE (Pre-Boot-Execution) ROM on the Plug-N-Run G2 provide diskless booting over LAN from a server.

Accompanying materials include a Starter Kit with a complete set of interface adapters, and reference schematics and bill of materials. PFU Systems provides customization and production of carrier boards through its quick-turn ProDeS™ professional design services. Please contact your PFU Systems sales representative for further details.



PFU Systems™

a Fujitsu company

SPECIFICATIONS SUMMARY

FEATURE	SPECIFICATION
<b>MODULE</b>	
Compatibility Interface	Plug-N-Run G2 modules 320-pin mezzanine connector, 50 insertions/removals limit
<b>PERIPHERAL I/O</b>	
Ethernet PHY	Intel® 82562ET, 10/100Base-T
IEEE1394a & CardBus Controller	Texas Instruments PCI4520
USB 2.0 Controller	Via Technologies VT6202
Audio Codec	Cirrus Logic CS4299, AC'97
GPS Compatibility	Trimble Lassen™ SQ
Bluetooth Compatibility	Smart Modular BlueOpal, USB
Biometric Fingerprint Sensor Compatibility	Fujitsu MBF200, USB
Touch Panel Controller	Fujitsu NC41120-0015, 7-Wire
PC Speaker	Piezoelectric buzzer
<b>I/O CONNECTORS &amp; HEADERS</b>	
GPS	1x 8-pin micro socket
Bluetooth	1x USB type A connector
Biometric Fingerprint Sensor	1x 5-pin header
Touch Panel	1x 15-pin FPC connector
Mini PCI	1x 124-pin type IIIA socket
Mezzanine X-Bus, SMBus, GPIO	1x 60-pin header
CardBus	2x Type II slots or 1x Type III slot
FireWire™	2x IEEE 1394 6-pin connectors
USB 2.0	3x USB type A connectors
Ethernet	1x RJ45 connector
Audio	3x 3.5mm jacks, stereo line-in, speaker-out, mono mic-in
IDE	1x 50-pin socket, 1x 40-pin header
CompactFlash	1x Type II slot
Floppy Disk Drive	1x 26-pin FPC connector
Serial	1x RS232 9-pin D-Sub connector, 1x RS232 10-pin header
Parallel	1x IEEE1284 25-pin D-Sub connector
Keyboard/Mouse	1x PS/2 6-pin Mini-DIN connector
CRT	1x 15-pin D-Sub connector
LCD	1x 41-pin header (CMOS), 1x 20-pin header (LVDS)
LCD Inverter Power	1x 4-pin header (+5VDC, +12VDC, GND)
CMOS Backup Battery	1x VL1220, populated
Power Supply	1x 20-pin ATX header (+3.3VDC, +5VDC, +12VDC, GND)
Mezzanine Power	1x 12-pin header (+3.3VDC, +5VDC, +12VDC, GND)
Fan	2x 3-pin header
<b>OPERATING CONDITIONS</b>	
Ambient (Ta)	0 – 50°C
Power Supply	110V/220V ATX power supply
<b>PHYSICAL</b>	
Dimensions	182.8mm x 203.2mm x 25.4mm (7.2" x 8" x 1")
Weight	≤ 300g (10.5 oz)
<b>ENVIRONMENTAL</b>	
Storage Temperature	-20 - 65°C (0-90% RH)

ORDERING INFORMATION:	
ITEM	PART NO.
<b>Carrier Board</b>	
MobilonCARD Carrier Board	PS2PRMBCARD
<b>Accessories</b>	
Starter Kit (incl. Bluetooth, GPS, Fingerprint Sensor)	PS2PRMBCARDKIT
Reference Design (Schematics, BOM, Gerbers)	PS2PRMBCARDREF
6.5" LCD Panel Starter Kit	C2i-LCD-KITAA
10.4" LCD Panel Starter Kit	C2i-LCD-KITBB
LVDS Panel Starter Kit	PSLCDLVDSKIT
<b>Plug-N-Run G2 Modules</b>	
400MHz Plug-N-Run G2	PS2PR400
650MHz Plug-N-Run G2	PS2PR650
933MHz Plug-N-Run G2	PS2PR933

**SALES OFFICES**

<p><b>Headquarters &amp; Int'l Sales Office</b>                      PFU Systems, Inc.                      1331 Lawrence Expressway, Ste 200                      Santa Clara, CA 95051-3501                      Phone: 408.236.3000                      Fax: 408.236.3099</p>	<p><b>Midwest Sales Office</b>                      PFU Systems, Inc.                      2600 Fernbrook Lane, Ste 130                      Plymouth, MN 55447-4752                      Phone: 763.551.8261                      Fax: 763.551.8265</p>	<p><b>Eastern Sales Office</b>                      PFU Systems, Inc.                      206 New Edition Court                      Cary, NC 27511-4451                      Phone: 919.319.0900                      Fax: 919.319.3552</p>	<p>For more information and a list of dealers and representatives near you visit:  <a href="http://www.PFUsystems.com">www.PFUsystems.com</a>                      or call your nearest PFU Systems office listed at the left.</p>
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