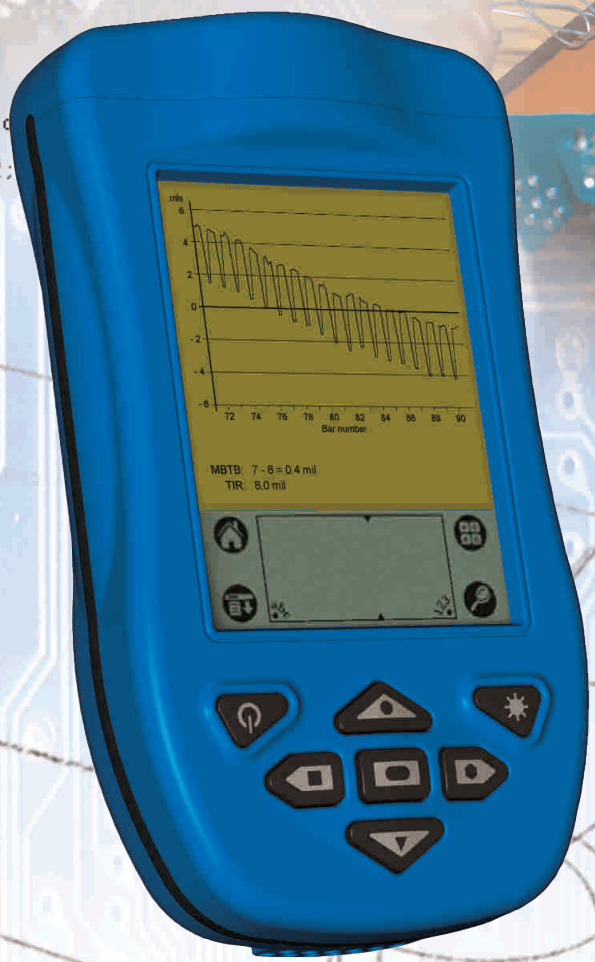
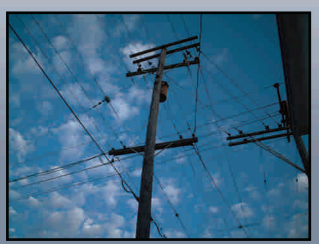
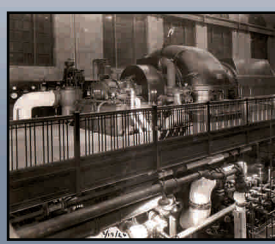
Meazura™

RDA - Rugged Digital Assistant



(Meazura™ + Developer) = **Enterprise & Industrial Applications UNLIMITED**



ACEECA™

palm® POWERED

Overview

RUGGED :: RELIABLE

Specifically designed for handheld computing tasks in enterprise and industrial applications, the Meazura™ is the world's first waterproof Palm Powered device, sealed to the world recognized IP67 standard. The modular design of the Meazura™ allows it to be customized for literally 1,000's of different applications.

For reliability, you can't beat the Palm Operating System, found in approximately 30 million portable devices worldwide. The Palm OS® is recognized as the world leader for it's reliability and ease of use.

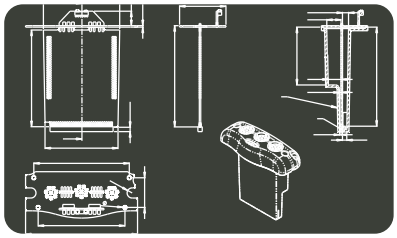
With more than 250,000 registered developers, more than 18,000 Palm OS® applications available worldwide, plus a wide range of development tools, the Palm OS® is the ideal choice for handheld computer applications.

MZIO™ Expansion Slot

Pin #	Symbol	Description	Direction	Pin #	Symbol	Description	Direction
1	GND	System Ground	Power	68	GND	System Ground	Power
2	D3	Data	In / Out	67	USB_D+	USB D+	In / Out
3	D4	Data	In / Out	66	D10	Data	In / Out
4	D5	Data	In / Out	65	D9	Data	In / Out
5	D6	Data	In / Out	64	D8	Data	In / Out
6	D7	Data	In / Out	63	UART2_CTS*	UART2 Clear to send	In
7	CS0*	Chip Select	Out	62	UART2_RTS*	UART2 Request to send	Out
8	A10	Address	Out	61	IrDA_RX	UART2 / IrDA Receive	In
9	OE*	Output Enable	Out	60	IrDA_TX	UART2 / IrDA Transmit	Out
10	A11	Address	Out	59	SPI_MOSI	SPI MOSI	In / Out
11	A9	Address	Out	58	SPI_MISO	SPI MISO	In / Out
12	A8	Address	Out	57	SPI_CLK	SPI Clock	In / Out
13	A13	Address	Out	56	SPI_SS*	SPI Slave Select	In / Out
14	A14	Address	Out	55	SPI_DR* / PWM	SPI Data Ready / PWM	In / Out
15	WE*	Write Enable	Out	54	MOD_RESET	Module Reset	In / Out
16	MOD_IREQ*	Module Interrupt Request	In	53	A22	Address	Out
17	VCCSW	3V3, 200mA	Power	52	VCC	3V3, 50mA	Power
18	VBATT	Battery Voltage, 1A	Power	51	VBATT	Battery Voltage, 1A	Power
19	A16	Address	Out	50	A21	Address	Out
20	A15	Address	Out	49	A20	Address	Out
21	A12	Address	Out	48	A19	Address	Out
22	A7	Address	Out	47	A18	Address	Out
23	A6	Address	Out	46	A17	Address	Out
24	A5	Address	Out	45	IrDA_EN*	IrDA Enable	Out
25	A4	Address	Out	44	UART1_TX	UART1 Transmit	Out
26	A3	Address	Out	43	UART1_RX	UART1 Receive	In
27	A2	Address	Out	42	CS1*	Chip Select	Out
28	A1	Address	Out	41	D15	Data	In / Out
29	A0	Address	Out	40	D14	Data	In / Out
30	D0	Data	In / Out	39	D13	Data	In / Out
31	D1	Data	In / Out	38	D12	Data	In / Out
32	D2	Data	In / Out	37	D11	Data	In / Out
33	USB_D-	USB D-	In / Out	36	MOD_PWR	Module Power Control	In / Out
34	GND	System Ground	Power	35	GND	System Ground	Power

Developing for the Meazura™

Hardware and or software applications for the Meazura™ can be developed at a fraction of the normal cost compared to an entirely custom-made device. Aceeca provides a wide range of development aids - whether it be example code or DXF mechanical diagrams for module printed circuit board design. There is even an optional multi channel -10 to +10V_{DC} module that allows hundreds of industry standard sensors to be connected with no additional circuit design required.



The Meazura™ features the MZIO™ expansion slot that supports multiple communication protocols with the system microprocessor, including SPI, UART (x2) and parallel (Compact Flash - Type I/II).

With a variety of plastic module moldings available, developers can in many cases avoid any expensive custom tooling to complete their design. If you do need custom tooling for your particular module requirements - let us know as we can produce tooling at a very economical cost.

Developer FAQ's

How do I get started with a module development?
The first thing you need to do is register as a developer on Aceeca's website - it's free and takes only a few minutes. Once you have registered you can then download the Meazura™ Developer Guide which provides you with extensive detail on all areas of module development. We update it regularly as a result of feedback from Developers so be sure to advise us that you want to receive automatic updates when they become available.

What support can I expect from Aceeca and how much will it cost?
Our aim is to help you complete your development whether you are making one device or 10,000. General support information relevant to developers is supplied at no charge. If you require more detailed help with your specific circuit design or software application we can quote you at an hourly cost. The Developer Forum on our website (functional early 2004) is likely to be your best source for free information. We encourage developers to share what they have learned. For Palm OS® questions, you can link into hundreds of developer sites worldwide.

How often do you intend to bring out new models and will this obsolete my design?
The Meazura™ was designed specifically for the enterprise and industrial markets as opposed to the ever changing consumer market where devices can go out of production in 18 months or less. While we will no doubt be bringing out new models, it is our intention to retain the older ones for several years to ensure developers have ample opportunity to profit from their design.

Having designed my module, I am ready to market it as a complete solution - can I purchase quantities of the Meazura™ at a discount?
Our website lists discount pricing up to 49 pcs and we will be happy to quote on larger volumes.

Do I have to market my device through Aceeca?
While we are happy to assist you in marketing your device through our website and distribution channels, you are free to market your device how you see fit.

Is there a certification process for new module designs?
In order to use the MZIO™ Compatible trademark you will need to have your module certified by an approved certification laboratory - please contact us for further details.

Model: MEZ1000-MDK

Specifications	Description	Remarks
Operating System	Palm OS® 4.1.2	Upgradeable to Palm OS® 4.x.
Microprocessor	33MHz Motorola DragonBall-VZ	
Memory		
Volatile	16 megabytes SDRAM	Approx 15MB available to user.
Non - Volatile	4 megabytes Flash	Approx 2MB available to user.
Expansion	via MZIO™ bus	Supports multiple formats.
Display		
LCD Type	FSTN (TDF) grayscale	
Resolution	160 x 160 pixels	
Viewable Area	56mm (W) x 56mm (H)	
Touch Screen	Analog Resistive	
Backlight	Electro luminescent	
Communications		
USB	1 megabyte / sec	
Serial (RS232)	1200 to 115200 bits / sec	
Infrared (IrDA)	1200 to 115200 bits / sec at 1meter	
Communications Connector	13 pin - custom gold plated pins	Cradle or communications cable.
MZIO™ Expansion Slot	68 pin - multi format support	Includes: Parallel Interface, UART x 2, SPI Master / Slave
Battery		
Type	Lithium Ion, custom battery pack	Rechargeable.
Voltage	3.6V nominal	
Capacity	1900 mAh	
Protection	Over charge / discharge and thermal	
Charging Current	1.2A (maximum)	Via cradle or comms cable.
Charging Input	9V DC nominal	Use only charger supplied.
Mechanical		
Dimensions	169.5mm (L) x 94mm (W) x 39mm (H)	
Weight	430gm (approx)	
Environmental		
Operating Temperature	32°F to 122°F (0°C to 50°C)	
Storage Temperature	14°F to 140°F (-10°C to 60°C)	
Humidity	5% to 90% relative humidity	Non-condensing.
RFI / EMC	CSPR22, CSPR24	RF emissions & ESD immunity.
FC	Part 15, Class A	
CE	EU EMC Directive	
Sealing	IP67	Submersible to 1 meter (30 min).
Current Consumption		
Power on	21mA typical	Meazura only - backlight off.
Full System	60mA typical	Backlight on.
Sleep Mode	1 to 2mA typical	

Specifications subject to change at any time. Please contact Aceeca for latest revision.

Rev: 111803-1603

MEZ1000-MDK Kit

- MEZ1000 Unit
- Stylus
- Developers Module
- Extender Board
- USB & Serial Comms cable
- DC Adaptor
- 8 core sensor cable
- Meazura™ Software

Optional items

- Desktop Cradle
- Holster with belt loop

http://www.aceeca.com

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