# BSP-1070

## 7" ARM-Based Fanless Panel PC with RS-422/485 and GPIOs



#### Features

- 7" LCD with display solution 800 x 480, WVGA
- Supports Atmel ARM9-based CPU with 400MHz
- 128MB SDRAM/128MB NAND Flash, 2MB Data Flash
- DC 12V ~ 40V wide range power input
- Fanless for 0°C ~ 60°C harsh operation environment
- Supports wide temperature T model -20°C ~ 75°C by option
- Supports RS-422/485 with GPIOs for sensing and control
- IP 65 on front panel protection
- Sealed resistive touch screen and 1 million times minimum
- Wide temp TFT LCD with LED backlight, up to 50K hours
- Supports Wi-Fi by OEM/ODM inquiry

To fulfill the complicated operation required in the automation market, AdvanIPC provides the BSP-1070 series with Atmel 400MHz ARM9

RISK-based CPU, 7" TFT brilliant wide screen LCD display, sealed resistive touch screen and wide range DC power input.

These systems are equipped with 128MB SDRAM, 128MB NAND Flash, and 2MB Data Flash for system recovery which support the

mission-critical industrial applications. BSP-1070A/B-5060 series are pre-installed with Linux 2.6.38 OS, enables this ideal Linux-ready platform

for versatile embedded application. BSP-1070A/B-6060 series are with Windows CE 6.0 which makes this WinCE-ready system an ideal

platform for developing remote devices monitoring and control applications.

All BSP-1070 series come with one 10/100Mbps Ethernet, two USB 2.0 hosts, four serial ports, four GPIOs, one Console port, one audio out, a wide range DC input and an optional Wi-Fi feature. They are ready platform for all kind of industrial applications, including factory automation, machine automation, warehouse management and energy-saving control systems.

## **Specifications**

Hardware Specifications					
System					
CPU	ATMEL ARM9 400MHz AT91SAM9G45				
Memory	SDRAM 128MB, NAND Flash 128MB				
	Data Flash 2MB for system recovery				
External I/O	• 1 x RJ-45 10/100Mbps Ethernet				
	• 3 x DB-9 RS-232 (COM 3/5/6 - P1/P3/P4)				
	and 1 x DB-9 console port				
	• 1 x Phoenix male 10-pin header for				
	1 x RS-422/485(COM4/P2) and 4 x GPIOs				
	• 2 x USB 2.0 Hosts, 1 x USB 2.0 Client				
	• 1 x Phoenix male 3-pin for 12 ~ 40V DC input				
	1 x Audio Phone Jack				
	• 1 x Wi-Fi antenna (optional feature)				
LCD					
Display Size	7" TFT-LCD				
Display Resolution	800 x 480				
Brightness(cd/m2)	400				
Backlight Lifetime	LED 50,000Hrs				

Touch Screen				
Туре	Resistance touch			
Transparency	82.5% Typ.			
Mechanical				
Frame Material	Steel Metal (A) or Stainless (B)			
Front Panel Protection	IP65			
Mounting	Panel / VESA Mount			
Dimension(WxHxD)	214x158x42mm(8.43"x6.22"x1.65")			
Mounting Depth	90mm(3.54")			
Cut-out Dimension(WxH)	198x142mm(7.80"x5.59")			
Net Weight/Gross Weight	1.7kg / 2.0kg			
Environmental Specifications				
Operation Temperature	0 ~ 60 °C / -20 ~ 75 °C(T model)			
Operation Humidity	20% ~ 85% @40°C, non-condensing			
Storage Temperature	-30 ~ 85 °C			
Storage Humidity	10% ~ 90% @40°C, non-condensing			
Shock	30G peak acceleration (11msec duration)			
Vibration	5~500Hz 4.5G RMS random			
Certification	CE, FCC Class A			

All product specifications are subject to change without notices

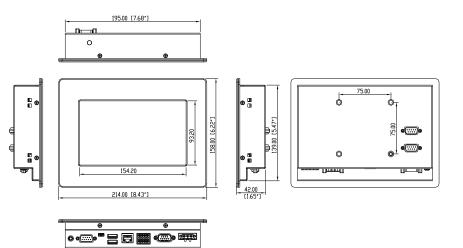
Software Specifications for BSP-1070A/B-5060 series					
General					
OS	Linux, Kernel 2.6.38				
Boot Loader	U-Boot 1.1.2				
File Systems	UBI, JFFS2, ETX2/ETX3, VFAT/FAT, NFS				
Pre-installed Utilities					
	bash, busybox, madplayer, psplash, sysvinit, wget, ipkg, procps(for webmin), psmics, gpe, lighttpd, vsftpd, iptable, ppp, openssh, alsa, wireless_tools, usbutils, phyton, jamvm, php, util-linux-mount/umount, qt4-embedded, mysql, perl, sqlite3, gtk+, x11, artila utility, snmp and more utilities in product CD				
Tool Chain for Linux					
GCC	C/C++ PC cross compiler				
GLIBC	POSIX Library				
GUI	GTK+, X window (x11), GPE and				
	Qt4-embedded				
USB Host Drivers					
Generic Flash drive					
RS-232 adaptors	For Prolific PL-2303 compatibles				
WiFi dongles	Rt2500/rtl8187/rt73/zd1211 chips				
Package Management &	System Administration				
Ipkg	Package installation, upgrade and removal				
Webmin	For web-based system administration				

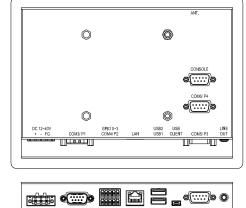
Software Specifications for BSP-1070A/B-6060 series						
General						
OS	Windows CE 6.0 Pro version					
Ready-to-use Network Services						
Web Server	Including ASP support					
Telnet Server						
FTP Server						
Remote Display Control	Built Windows's client utility					
Enhanced Command Mode Utility						
ifconfig	Modify the network interface settings					
usrmgr	Create and manage user accounts					
update	Update the kernel image and file system					
Init	Organize the application programs which					
	runs automatically after system boot-up					
gpioctrl	Control the GPIOs					
System Failover Mechanism	n					
NAND Flash crashed	System can boot up from Data Flash					
	System Recovery Function by Console					
	Menu-driven utility will be active					
Application Development & Deployment						
Programming language	Comes with SDK for C/C++					
Application program	ActiveSync, USB pen drive locally,					
can be transferred by	FTP remotely					

## **Rear View**

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Panel Cut-out Diemensions: 198 x 142 mm(7.80" x 5.59")

## **Ordering Information**

Ordering Part Number	LCD	Frame Material	OS	Operating Temperature	Lead Time
BSP-1070A-5060	7" TFT	Steel	Linux 2.6.38	0 ~ 60 °C	Avaiable
BSP-1070A-6060	7" TFT	Steel	Win CE 6.0	0 ~ 60 °C	Avaiable
BSP-1070B-5060	7" TFT	Stainless	Linux 2.6.38	0 ~ 60 °C	4 weeks
BSP-1070B-6060	7" TFT	Stainless	Win CE 6.0	0 ~ 60 °C	4 weeks