

JNB-1405

Fully Rugged Notebook with Mobile Intel GS45 Platform



1
PICMG

2
SBC & SoM

3
CompactPCI

4
Network

5
BoxPC & Special IPC

6
HMI & TabletPC

7
Rugged Series

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4
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6
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7
Rugged Series



Features

- Adopts Intel Core™ 2 Duo L9400 processor, fanless design
- 14.1" TFT LCD with tempered glass, optional sunlight readable LCD
- Magnesium alloy shell with reinforced rubber edge covering
- MIL-STD-461F and MIL-STD-810G(IP65) certified
- Flexible Media Bay Feature, supports up to 4 function modules
- Optional fingerprint identification and camera
- Supports optional expansion docking

Specifications

Processor	Mobile Platform	Intel Core™ 2 Duo SL9400 1.86GHz low-power consumption processor
	L2 Cache, FSB	6MB Cache, 1066MHz FSB
Chipset	North Bridge	Mobile Intel GS45 Express chipset
	Graphics Controller	Integrated Mobile Intel GMA 4500MHz high definition graphics controller, 533MHz core speed
Memory	South Bridge	ICH9-M
	Onboard Memory	Onboard 512MB DDR2 800 memory
	Memory Expansion Slot	1 x 200-Pin SO-DIMM, up to 2GB DDR2 800 memory
	Max. Memory	2.5GB DDR2 800 memory
Display	LCD Size	14.1" TFT LCD
	Resolution	XGA, 1024 x 768
	Tempered Glass	Standard
	Sunlight Readable LCD	Optional
	Touch Screen	N/A
	External VGA	1 x VGA(15-pin D-sub)
Storage	Primary Storage	1 x 80GB wide-temperature shock-mounted HDD, optional 250/320/500 GB Optional 64/128/256GB wide temperature SATA SSD (shock-mounted, -40°C ~ 85°C)
	Secondary Storage	Optional secondary storage pack
Please contact EVOC for other capacities of storage devices with different capacities.		
Multimedia Bay	Optical Driver(Standard)	Removable Ultra-Slim Combo, DVD-ROM or DVD-R/W
	Secondary Battery	Optional removable hot-swap secondary battery pack
	Secondary Storage	Optional removable secondary SATA HDD or SSD
	3" and 4" Serial Port	Optional fixed 2 x RS-232/422/485

Note: Above function modules are optional, and the multimedia bay can only accept one of them by simultaneously.

Keyboard	Silicone Keyboard	Silicone keyboard with backlight, waterproof, dustproof, 87keys
Touch-Pad	Capacitive	Yes (default)
	Resistive(humid environments)	Optional
I/O Interface	Serial Port	2 x RS-232 /422/485(9-pin D-sub)
	Note: The communication mode of serial ports can be set up by jumper in the factory. Default RS-422 for these two serial ports. Please assign communication modes if you need the other modes in initial stage.	
Communication Interface	USB2.0	3 x USB2.0
	IEEE 1394	1 x IEEE1394b interface(Firewire)
	Audio-out	1 x Audio-out (Mini-jack)
	Mic-in	1 x Mic-in (Mini-jack)
	Internal Speaker	Internal 4-watt Stereo speakers
	Ethernet	1 x 10/100/1000Mbps LAN port (RJ-45)
	Internal Modem	Optional 56Kbps ITU V92m modem(RJ-11)
	WiFi	Optional 802.11a/b/g/n
Camera	Bluetooth	Optional
	GPS	Optional
Expansion Slot	1.3 mega pixel camera	N/A
	PCMCIA	1 x PCMCIA Type II, supports 32-bit Cardbus
Security Features	Express Card	1 x Express Card/54mm
	Card Reader	1 x 5-In-1 card reader, supports SD/MS/MS-Pro/XD/MMC
	Docking	1 x Docking Connector
	Fingerprint Identification	Optional
Power Supply	Kensington Lock	Yes
	Primary Battery Pack	1 x 6800mAh or 7800mAh battery pack, removable, hot-swap capability
	2nd Battery Pack	Optional 3700mAh 6-cell battery pack, removable, hot-swap capability
	DC Input Connector	1 x 4-Pin normal connector
AC Adapter	AC Adapter	100V~240V 50/60Hz AC input, normal 4-pin DC output connector
	Vehicle DC Adapter	Optional 90W vehicle DC adapter with normal 4-pin output connector, 9V to 32V DC input

Mechanical and Environmental

Physical Characteristics	Material	Full magnesium alloy case
	Dimensions	328mm x 272mm x 46mm (W x H x D)
	Weight	3.8kg (Exclude battery, storage drive and DVD)
Rugged Features	EMC,EMI	MIL-STD-461F certified
	Working Temperature	-20°C~-55°C/ -4°F~ -131°F, MIL-STD-810G method 501.5 and 502.5 procedure II
	Storage Temperature	-40°C~70°C/ -40°F~ 158°F, MIL-STD-810G method 501.5 and 502.5 procedure I
	Relative Humidity	95% RH, non-condensing, MIL-STD-810G method 507.5 procedure II
	Anti-Vibration	20~2000Hz/7.7g(Non-operating, X,Y, Z axis), MIL-STD-810G method 514.6
		20~2000Hz/1.9g(Operating, X,Y, Z axis), MIL-STD-810G method 514.6
	Transit Drop	120cm/48-inch height drops, MIL-STD-810G method 516.6
	Operating Altitude	15,000ft at 2,000ft/min, MIL-STD-810G method 500.5
	Water Resistance	IP65 compliant(Anti water spray, drip rain), MIL-STD-810G method 506.5 procedure III
	Conformal Coating	Optional Anti-Fungus and Anti-Salt Fog compliant

Ordering Information

Part Number	Model Number	Description
0010-024430	JNB-1405	Intel Core™ 2 Duo SL9400/512MB RAM/80G wide-temperature HDD/14.1" LCD /DVD-ROM/WiFi/Bluetooth/fingerprint identification /modem/7800 mAh battery/AC adapter
0010-034450	JNB-1405-BASIC	Intel Core™ 2 Duo SL9400/2.5GB RAM/250G HDD/14.1" sunlight readable LCD /DVD-R/W /WiFi/Bluetooth/Modem/7800 mAh battery/AC adapter
0010-034360	JNB-1405-1	Intel Core™ 2 Duo SL9400/2.5GB RAM/14.1" sunlight readable LCD/WiFi/Bluetooth/fingerprint identification/Modem/AC adapter
0010-034370	JNB-1405-2	Intel Core™ 2 Duo SL9400/2.5GB RAM /14.1" sunlight readable LCD/3th and 4th RS-422/ WiFi /AC adapter
0010-032820	JNB-1405-3	Intel Core™ 2 Duo SL9400/2.5GB RAM /14.1" LCD/fingerprint identification /AC adapter
0010-032830	JNB-1405-4	Intel Core™ 2 Duo SL9400/2.5GB RAM /14.1" LCD /AC adapter

Note: The JNB-1405-2 does not support optical driver, secondary battery module and secondary storage pack.

Optional Accessories		
1100-001211	Primary battery pack	7800mAh/9-cell primary battery
1100-000371	Secondary battery pack	3700mAh/6-cell secondary battery
1100-000261	80G HDD Module	80G wide-temperature shock-mounted HDD module (-30°C ~ 85°C, 8M cache, SATA 300MB/s)
1100-000251	250GB HDD Module	250GB shock-mounted SATA HDD module
1100-002211	320GB HDD Module	320GB shock-mounted SATA HDD module
1100-002221	500GB HDD Module	500GB shock-mounted SATA HDD module
1100-002171	64GB MLC SSD Module	64GB shock-mounted SATA SSD module with MLC NAND flash (-40°C ~ 85°C)
1100-002191	64GB SLC SSD Module	64GB shock-mounted SATA SSD module with SLC NAND flash(-40°C ~ 85°C)
1100-002181	128GB MLC SSD Module	128GB shock-mounted SATA SSD module with MLC NAND flash (-40°C ~ 85°C)
1460-051041	JNB-1405 DVD-ROM	DVD-ROM module, supports CD/DVD readable, CD recordable and CD rewritable
1460-056261	JNB-1404/5 DVD-R/RW	DVD-R/RW module, supports CD/DVD readable, CD/DVD recordable and rewritable
1100-001251	Vehicle Adapter/Normal	Vehicle DC adapter, 9V to 32V DC input, 19V DC output with normal 4-pin connector
0020-043680	Vehicle Docking	JNB-1401 serials vehicle docking

* Please contact EVOC for other functions or configurations.

JNB-1406

Fully Rugged Notebook with Mobile Intel® HM65 Platform



Features

- Intel® HM65 chipset
- 2nd generation Intel® Core™ i7 embedded processor, fanless design
- Supports USB 3.0, SATA 6Gbps, eSATA and HDMI
- 2 x 10/100/1000Mbps LAN, up to 4 x RS-232/422/485
- Optional fingerprint identification, TPM, data encryption and drive self-destruct
- Flexible Media Bay Feature, supports up to 5 kinds of function modules
- Supports Contact Smart Card Reader, PCMCIA Type II, Express Card
- 13.3" TFT LCD with sunlight readable and tempered glass
- Magnesium alloy shell with reinforced rubber edge covering
- MIL-STD-461F, MIL-STD-810G (IP65) certified
- Ruggedized power supply input connector

SPECIFICATIONS

Processor	Mobile Platform	Onboard 2 nd generation Intel® Core™ i7-2610UE 32nm 64bit embedded processor, 1.5GHz, Maximum 2.4GHz with Intel® Turbo Boost Technology 2.0
	Smart Cache	4MB
Chipset	Main Chipset	Intel® HM65 Express chipset
	Graphics Controller	Integrated high performance 3D graphics controller by Core™ i7-2610UE processor, 350~850MHz core speed, Shared system memory, Intel® Dynamic video memory technology
Memory	Onboard Memory	Soldered 2GB DDR3 1333 memory
	Memory Expansion Slot	1 x 204-Pin SO-DIMM socket, up to 8GB DDR3 1066/1333 MHz memory
	Max. Memory	10GB
Display	LCD Size	13.3" TFT LCD
	Resolution	WXGA, 1280 x 800
	Tempered Glass	Standard
	Sunlight Readable	Standard
	Touch Screen	Optional
	External VGA	1 x VGA(15-pin D-sub)
	HDMI	1 x HDMI
Storage	Primary Storage	1 x 250GB removable shock-mounted SATA 6Gb/s HDD, optional 250/320/500 GB Optional 64/128/256GB wide temperature SATA SSD (shock-mounted, -40°C~85°C)
	Secondary Storage	Optional secondary storage pack
Note: Please contact EVOC for storage devices with different capacities.		
Multimedia Bay	Optical Driver(Standard)	Removable Ultra-Slim DVD-ROM or DVD-RW
	Secondary Storage Drive	Optional removable SATA HDD or SSD
	Secondary Battery	Optional removable hot-swap secondary battery pack
	3rd and 4th Serial Port	Optional removable serial port box(with 2 x RS-232/422/485)
	PCIe x1 bus	Reserved expansion slot, Supports customizable small dimension expansion module via PCIe x1 bus

- Note:**
1. Above function modules are optional, the multimedia bay can only accept one of them at one time.
 2. The communication mode of serial ports can be set up by jumper before in factory.
 3. Default RS-422 for these two serial ports, Please assign communication modes if you need the other modes in initial stage.

Keyboard	Silicone Keyboard	Silicon Keyboard with backlight, Waterproof, dustproof, 87 keys
	Capacitive	Optional Plastic Keyboard, Waterproof
	Resistive	Standard (Default)
Touch-Pad		Optional
I/O Interface	Serial Port	2 x RS-232/422/485 (9-pin D-sub)
	USB3.0	2 x USB3.0(SuperSpeed USB), compatible with USB2.0 device
	USB2.0	USB2.0 and eSATA share the same interface
	IEEE 1394	1 x IEEE1394a (Firewire)
	eSATA	1 x eSATA 3Gb/s interface
	Audio-out	1 x Audio-out (Mini-jack)
	Mic-in	1 x Mic-in (Mini-jack)
	Internal Speaker	Internal Stereo speakers
Communication Interface	Ethernet	2 x 10/100/1000Mbps LAN port (RJ-45)
	Internal Modem	Optional 56Kbps ITU V92m modem(RJ-11)
	WiFi	Optional Intel® Wireless WiFi Link 802.11a/b/n
	3G	Optional 3G module, with 1 x SIM card socket
	Bluetooth	Optional Bluetooth™ V2.0 + EDR, compatible with Bluetooth V1.2
	GPS	Optional Internal GPS module with antenna
Note: The WiFi and 3G functions are optional, and only one of them can be accepted at one time.		
Expansion interface	Smart Card Reader	N/A
	PCMCIA	1 x PCMCIA Type II, supports 16-bit PC card and 32-bit Cardbus
	Express Card	1 x Express Card/54mm
	Card reader	N/A
	Docking	N/A
Note: The RJ-11, 1394, eSATA, USB2.0 will be occupies by docking connector		
Security Features	Fingerprint Identification	Optional fingerprint reader
	Storage Drive Security	Optional data encryption and storage drive self-destruct
	TPM 1.2	Optional
	Kensington Lock Hole	Yes
Power Supply	Primary Battery Pack	Optional 6600mAh or 7800mAh battery pack, removable, hot-swap capability
	2nd Battery Pack	Optional 3700mAh 6-cell battery pack, removable, hot-swap capability
	DC Input Connector	1 x 4-Pin ruggedized connector
	AC Adapter	100V~240V 50/60Hz AC input, with ruggedized DC output connector
	Vehicle DC Adapter	Optional 90W vehicle DC adapter with ruggedized output connector, 9V to 32V DC input

Mechanical and Environmental

Physical Characteristics	Material	Full magnesium alloy case
	Dimensions	328mm x 272mm x 46mm (W x D x H)
	Weight	3.5~3.8kg (Exclude battery, Storage drive and DVD-R/W)
Rugged Features	EMC/EMI	MIL-STD-461F certified
	Working Temperature	-20°C ~ 55°C/ -4°F ~ 131°F, MIL-STD-810G method 501.5 and 502.5 procedure II
	Storage Temperature	-40°C ~ 70°C/ -40°F ~ 158°F, MIL-STD-810G method 501.5 and 502.5 procedure I
	Relative Humidity	5%~95%RH, non-condensing, MIL-STD-810G method 507.5 procedure II
	Anti-Vibration	20~2000Hz/7.7g(No-operating, X,Y, Z axis), MIL-STD-810G method 514.6 20~2000Hz/1.9g(Operating, X,Y, Z axis), MIL-STD-810G method 514.6
Note: Greater anti-vibration performance can be provided. Please contact EVOC for more information.		
	Transit Drop	120cm/48-inch height drops, MIL-STD-810G method 516.6
	Operating Altitude	15,000ft at 2,000ft/min, MIL-STD-810G method 500.5
	Water Resistance	IP65 compliant(Anti water spray, drip rain), MIL-STD-810G method 506.5 procedure III
	Conformal Coating	Optional Anti-Fungus and Anti-Salt Fog compliant

JNB-DOCKING

Rugged Vehicle Docking for JNB-1401 Series



1
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2
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7
Rugged Series

Features

- Adopts high intensity al-alloy and sheet metal
- Excellent EMC and anti-vibration performance, high reliability and stability
- Shock absorption device is equipped between the top and the bottom module
- Supports PCI, PCI-Express x1 and PCI-104 expansion devices
- Supports 2 x RS-232/422/485, 1 x LPT and 2 x USB
- Supports 9V~32V DC input by external vehicle DC adapter
- Optional ruggedized I/O connector according to different applications

Specifications

Expansion slot	PCI	Available 2 x PCI slot (32-bit, 33MHz, 5V)
	PCI-Express	2 x PCI-Express 2.0 x1 slot
	PCI-104	1 x PCI-104 expansion interface, Supports up to 2 x PCI-104 peripherals.(32-bit, 33MHz)
	Note: The PCI-Express x1 and PCI-104 are set at the same position, so it can only support 2 x PCI-Express x1 or 2 x PCI-104 or 1 x PCI-Express x1 and 1 x PCI-104 expansion devices.	
I/O Port	Serail Port	2 x RS-232/422/485(9-pin D-sub), the mode selection of serial port can be changed by configuration switch.
	USB	2 x USB 2.0
	Parallel Port	1 x Parellel port(LPT, 25-pin D-sub)
Power Supply	Ruggedized connector	Optional customized ruggedized connector
	DC input Connector	1 x 4-Pin normal connector and with one power status indicator
		Optional ruggedized connector
	Vehicle DC Adapter	Optional 90W vehicle DC adapter with normal 4-pin output connector, 9V to 32V DC input
		Optional ruggedized output connector
Ventilation	Chassis Fan	1 x 5cm ball bearing fan

Mechanical and Environmental

Physical Characteristics	Material	Full magnesium alloy case
	Dimension	340mm x 291mm x 102mm (W x D x H)
	Net Weight	6kg
Rugged Features	EMC,EMI	
	Working Temperature	-20°C~ 50°C
	Storage Temperature	-40°C~ 70°C
	Relative Humidity	5~95%RH, non-condensing
	Anti-Vibration	5~200Hz/1.5g(Operating) 52~2000Hz/5.0g(No-Operating)
	Anti-Shock	15g peak acceleration at 11ms duration(Operating) 30g peak acceleration at 11ms duration(No-Operating)
	Reliability	MTBF≥30,000h, MTTR≤1h
	Conformal Coating	Anti-Fungus and Anti-Salt Fog compliant

Ordering Information

Part Number	Model Number	Description
0020-043680	Vehicle Docking	JNB-1401 serials vehicle docking
1100-001251	Vehicle Adapter/Normal	Vehicle DC adapter, 9V to 32V DC input, 19V DC output with normal 4-pin connector
1100-001261	Vehicle Adapter/Ruggedized	90W vehicle DC adapter with ruggedized output connector, 9V to 32V DC input

* Please contact EVOC for other functions or configurations.

