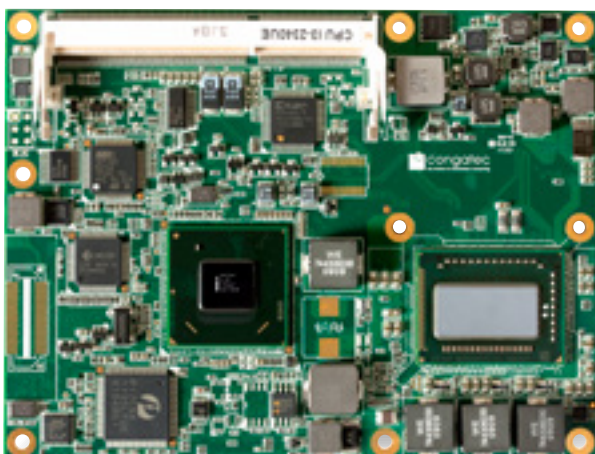


# conga-BP77

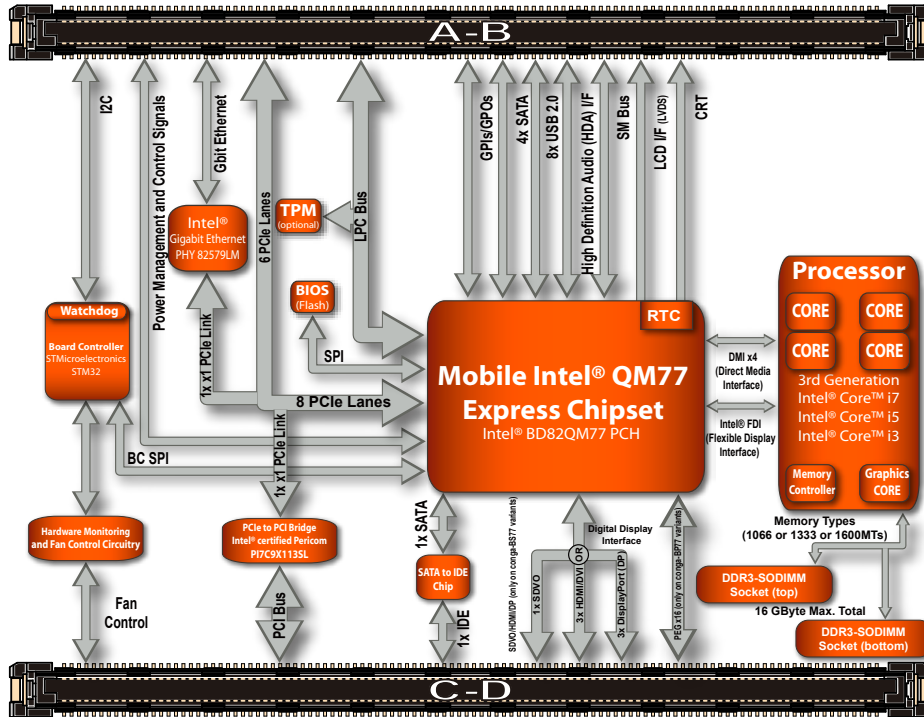


- Highest Performance COM Express Type 2
- 3rd Generation Intel® Core™ processor-based platform
- Better transcode HD-HD, HD Video Conferencing
- Improved Graphics Performance, DirectX®11

**COM**  **Express®**

Formfactor	Formfactor COM Express™ Basic   (95 x 125 mm)   Type II Connector Layout			
CPU	Intel® Core™ i7-3612QE	4x 2.1 GHz	6MB cache	TDP 35W
	Intel® Core™ i7-3555LE	2x 2.5 GHz	4MB cache	TDP 25W
	Intel® Core™ i7-3517UE	2x 1.7 GHz	4MB L2 cache	TDP 17W
	Intel® Core™ i5-3610ME	2x 2.7 GHz	3MB cache	TDP 35W
	Intel® Core™ i3-3120ME	2x 2.4 GHz	3MB L2 Cache	TDP 35W
	Integrated dual channel memory controller   up to 25,6 GByte/sec. memory bandwidth Integrated Intel® HD Graphics with dynamic frequency up to 1100 MHz   Intel® Clear Video HD Technology			
DRAM	2 Sockets   SO-DIMM DDR3 1600 MT/s   up to 16 GByte			
Chipset	Mobile Intel® 7 Series Chipset: Intel® QM77			
Ethernet	Intel® 82579 GbE LAN Controller with AMT 8.0 support (optional)			
I/O Interfaces	6x PCI Express™ GEN 2.0 lanes   4x Serial ATA® (AHCI) with RAID support   1x EIDE (UDMA-66/100) optional   8x USB 2.0 (EHCI) PCI Bus 33 MHz Rev. 2.3   LPC bus   I²C bus (fast mode   400 kHz   multi-master)			
Sound	Digital High Definition Audio Interface with support for multiple audio codecs			
Graphics	Intel® Flexible Display Interface (FDI)   OpenGL 3.1 and DirectX11 support   Three simultaneous independent displays. High performance hardware MPEG-2 decoding   WMV9 (VC-1) and H.264 (AVC) support Blu-ray support @ 40 MBit/s   hardware motion compensation			
LVDS	Dual channel LVDS transmitter   Supports flat panels 2x24 Bit interface   VESA mappings   resolutions up to 1920x1200   Automatic Panel Detection via EDID/EPI			
PEG	PCI Express Graphic Generation 3.0 (8GT/s)			
CRT Interface	350 MHz RAMDAC   resolutions up to QXGA (2048x1536)			
SDVO	1 x Intel compliant SDVO ports with 200MPixel/sec. Supports external DVI			
congatec Board Controller	Multi Stage Watchdog   non-volatile User Data Storage   Manufacturing and Board Information   Board Statistics   BIOS Setup Data Backup I²C bus (fast mode   400 kHz   multi-master)   Power Loss Control			
Embedded BIOS Features	AMI Aptio® UEFI 2.x firmware   8 MByte serial SPI firmware flash			
Security	The conga-BP77 can be optionally equipped with a discrete "Trusted Platform Module" (TPM). It is capable of calculating efficient hash and RSA algorithms with key lengths up to 2,048 bits and includes a real random number generator. Security sensitive applications such as gaming and e-commerce will benefit also with improved authentication   integrity and confidence levels.			
Power Management	ACPI 3.0 with battery support			
Operating Systems	Microsoft® Windows 8   Microsoft® Windows7   Microsoft® Windows® embedded Standard   Microsoft® Windows XP   Linux			
Power Consumption	Typ. application: Processor TDP: 17 .. 25 W   see manual for full details			
Temperature	Operating: 0 .. +60°C   Storage: -20 .. +80°C			
Humidity	Operating: 10 - 90% r. H. non cond.   Storage: 5 - 95% r. H. non cond.			
Size	95 x 125 mm (3.74" x 4.92")			

# conga-BP77 | Block diagram



# conga-BP77 | Order Information

Article	PN	Description
conga-BP77/i7-3612QE	046700	Intel® Core™ i7-3612QE quad core processor with 2.1GHz   6MB L3 cache and 1600MT/s dual channel DDR3 memory interface. Features PCI Express Graphics port
conga-BP77/i5-3610ME	046701	Intel® Core™ i5-3610ME dual core processor with 2.7GHz   3MB L3 cache and 1600MT/s dual channel DDR3 memory interface. Features PCI Express Graphics port
conga-BP77/i7-3555LE	046702	Intel® Core™ i7-3555LE dual core processor with 2.5GHz   4MB L3 cache and 1600MT/s dual channel DDR3 memory interface. Features PCI Express Graphics port
conga-BP77/i3-3120ME	046703	Intel® Core™ i3-3120ME dual core processor with 2.4GHz   3MB L3 cache and 1600MT/s dual channel DDR3 memory interface. Features PCI Express Graphics port
conga-BP77/i7-3517UE	046704	Intel® Core™ i7-3517UE dual core processor with 1.7GHz   4MB L3 cache and 1600MT/s dual channel DDR3 memory interface. Features PCI Express Graphics port
conga-BS67/HSP-HP-B	046170	Standard heatspreader for high performance COM Express modules conga-BS67   BS77 and BP77 with integrated heat pipes. All standoffs are with 2.7mm bore hole
conga-BS67/HSP-HP-T	046171	Standard heatspreader for high performance COM Express modules conga-BS67   BS77 and BP77 with integrated heat pipes. All standoffs are M2.5mm thread
conga-BS67/CSP-HP-B	046172	Standard passive cooling solution for high performance COM Express modules conga-BS67   BS77 and BP77 with integrated heat pipes   15mm silver fins and 20mm overall heat sink height. All standoffs are with 2.7mm bore hole
conga-BS67/CSP-HP-T	046173	Standard passive cooling solution for high performance COM Express modules conga-BS67   BS77 and BP77 with integrated heat pipes   15mm silver fins and 20mm overall heat sink height. All standoffs are M2.5mm thread
conga-BS67/CSA-HP-B	046174	Standard active cooling solution for high performance COM Express modules conga-BS67   BS77 and BP77 with integrated heat pipes   15mm silver fins   20mm overall heat sink height and integrated 12V fan. All standoffs are with 2.7mm bore hole
conga-BS67/CSA-HP-T	046175	Standard active cooling solution for high performance COM Express module conga-BS67   BS77 and BP77 with integrated heat pipes 15mm silver fins   20mm overall heat sink height and integrated 12V fan. All standoffs are M2.5mm thread
DDR3L-SODIMM-1600 (2GB)	068755	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 2GB RAM
DDR3L-SODIMM-1600 (4GB)	068756	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 4GB RAM
DDR3L-SODIMM-1600 (8GB)	068757	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 8GB RAM
<b>Accessories</b>		
conga-CEVAL	065749	Evaluation Carrier Board for COM Express Type 2 modules
conga-Cdebug	047854	COM-Express debugging platform. Including cable for COM   PS/2 and VGA
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM
conga-HDMI/Display Port adapter	500014	The conga-HDMI/DisplayPort adapter is used fo convert the chipset graphic ports Port-B   Port-C and Port-D to the HDMI or DisplayPort Interface
conga-FPA2	047250	Flatpanel prototype adapter to develop your own flatpanel adapter Including cables set

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Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».



## JONHON

«**JONHON**» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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