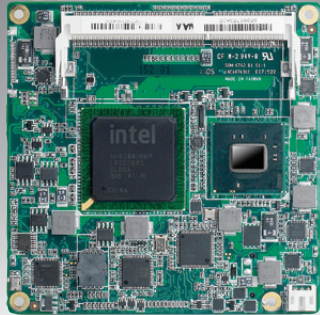


# SOM-6763 B1

## Intel® Atom™ Processor N455/D525 COM-Express Compact Module

**NEW**



### Features

- Embedded Intel® Atom™ Processor N455 SC 1.66 GHz / D525 DC 1.80 GHz + ICH8M
- Intel Gen 3.5 DX9, MPEG2 hardware decoder, supports 24-bit LVDS, VGA
- Supports 2 DDR3-667 for N455 up to 2 GB and DDR3-800 for D525 up to 4 GB SODIMMB
- Supports 5 PCIe x 1, 4 PCI masters, LPC, 3 SATAII, 8 USB 2.0, EIDE, GbE
- Supports iManager, SUSIAccess and Embedded Software APIs

**Software APIs:**

- Watchdog
- I<sup>2</sup>C
- SMBus
- H/W Monitor
- GPIO
- Brightness Control

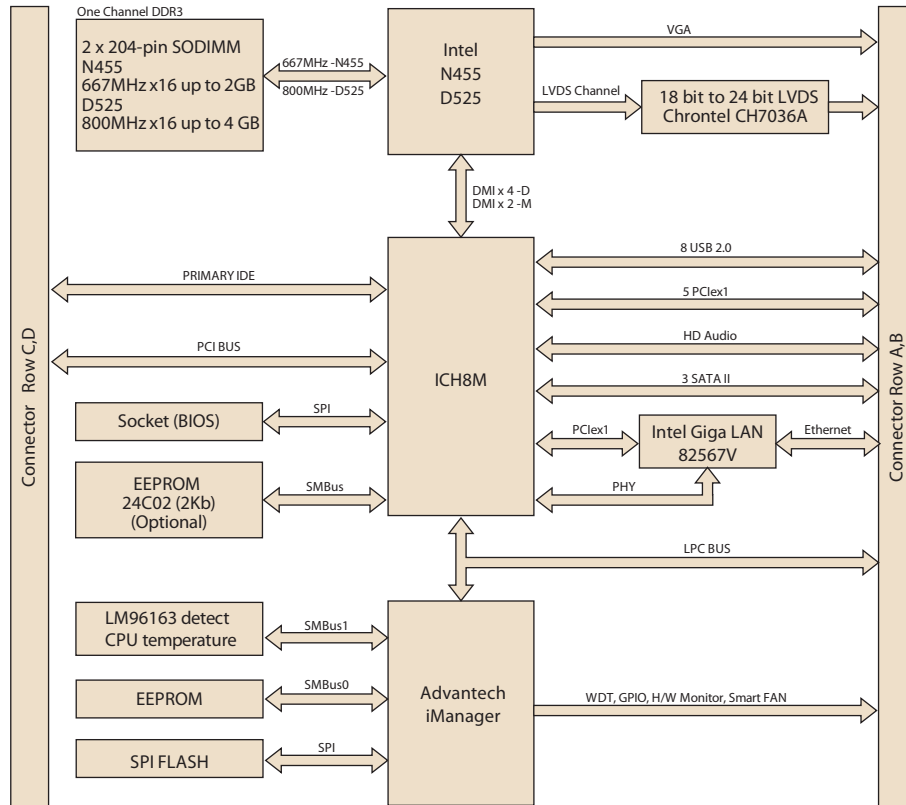
**Utilities:**

- BIOS flash
- Monitoring
- Embedded Security ID

### Specifications

Form Factor	COM-Express R2.0 Compact Module, Type II Pin-out.		
Processor System	CPU	Intel Atom Processor N455 1.66 GHz (single core), 512 KB L2 Cache Intel Atom Processor D525 1.80 GHz (dual core), 1 MB L2 Cache	
	System Chipset	ICH8M	
	BIOS	AMI 16 Mbit Flash BIOS	
Memory	Technology	Supports DDR3 667 MHz (N455) and 800 MHz (D525)	
	Max. Capacity	Up to 2GB for N455; up to 4GB for D525	
	Socket	2 x 204-pin SODIMM sockets	
Display	Chipset	Intel Atom N455 or Intel Atom D525	
	Graphic Engine	Intel Gen 3.5 DX9, MPEG2 hardware decoder	
	LVDS	24-bit single channel LVDS	
	VGA	Intel Atom N455 up to 1400 x 1050 Intel Atom D525 up to 2048 x 1536	
	DVI	-	
	TV Out	-	
	SDVO	-	
	Dual Display	CRT + LVDS	
Ethernet	Chipset	Intel 82567V Gigabit Ethernet	
	Speed	10/100/1000 Mbps	
WatchDog Timer	65536 level timer interval, from 0-65535 sec, multi-level, multi-option watchdog timer		
Expansion	LPC, 5 PCIe x1 (1 PCIe x4), 4 PCI masters, I <sup>2</sup> C		
I/O	PATA	1 EIDE (UDMA 100)	
	SATA	3 SATAII (300 MB/s)	
	USB	8 USB 2.0	
	Audio	High definition audio interface	
	GPIO	8-bit GPIO	
Power	Power Type	ATX, AT	
	Power Supply Voltage	+12 V and +5 VSB for ATX, +12V for AT	
	Power Consumption (Typical)	6763N (2 GB DDR3 667)	6763D (2 GB DDR3 800)
		+12 V @ 0.9 A	+12 V @ 0.94 A
	Power Consumption (Max, test in HCT)	6763N (2 GB DDR3 667)	6763D (2 GB DDR3 800)
+12 V @ 1.3 A		+12 V @ 1.5 A	
Environment	Operating Temperature	0 - 60° C (32 - 140° F)	
	Operating Humidity	0% - 90% relative humidity, non-condensing	
Mechanical	Dimensions	95 x 95 mm (3.74" x 3.74")	

## Block Diagram



## Ordering Information

Part No.	CPU	L2 Cache	Chipset	LVDS	VGA	Giga LAN	HD Audio	PCIe x4	PCIe x1	PCI	USB 2.0	SATA II	LPC	SMBus	ATX Power	AT Power	Thermal Solution	Operating Temp.
SOM-6763N-S6B1E	Atom N455 1.66 GHz	512 KB	ICH8M	24-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Passive	0 ~ 60° C
SOM-6763D-S8B1E	Atom D525 1.8 GHz	1 MB	ICH8M	24-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Active	0 ~ 60° C
SOM-6763NZ-S6B1E	Atom N455 1.66 GHz	512 KB	ICH8M	24-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Passive	-20 ~ 80° C
SOM-6763NZ2-S6B1E	Atom N455 1.66 GHz	512 KB	ICH8M	24-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Passive	-40 ~ 85° C
SOM-6763DZ-S8B1E	Atom D525 1.8 GHz	1 MB	ICH8M	24-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Active	-20 ~ 80° C
SOM-6763DZ2-S8B1E	Atom D525 1.8 GHz	1 MB	ICH8M	24-bit	Yes	1	Yes	Option	5	4	8	3	1	1	Yes	Yes	Active	-40 ~ 85° C

Note: Passive = fanless; Active = with fan

## Development Board

Part No.	Description
SOM-DB5700G-00A2E	Development board for COM-Express GLAN Rev.A2

## Optional Accessories

Part No.	Description
1960048815N001	Semi-Heatsink 95 x 95 x 17 mm
1960048819N001	Semi-Cooler 95 x 95 x 33.5 mm with 12V fan

## Packing List

Part No.	Description	Quantity
-	SOM-6763 B1 CPU Module	-
-	Utility CD	1
1960049022N001	Heatspreader	1

## Embedded OS

OS	Part No.	Description
Win XPE	2070009031	XPE WES2009 Lu- Pier V4.0 MUI24
Win CE 7.0	2070010929	Image CE 7.0 Pro SOM-6763 B1 V1.0 ENG