Cooling Installation

congatec offers 3 different cooling solutions

- Passive Cooling for CPUs with maximum 9 watt TDP (suitable only for PN:052400 conga-IGX/210HA)

- Passive Heatpipe Cooling for CPUs with maximum 15 watt TDP (suitable only for PN:052400 conga-IGX/210HA and PN:052401 conga-IGX/217GA)

- Active Cooling for CPUs with maximum 25 watt TDP (suitable all conga-IGX variants)

All these cooling devices include a backplate for mounting.

Do not remove the insulating foil of the backplates, this will damage the board.

Assembly Instruction:

- Hold the heatsink with one hand so that it doesn't tilt while tightening the screws

- Slightly tighten each of the 4 screws so that they hold the heat sink in place. To do so start with one screw and then slightly tighten the other screws using a crossover pattern. All the while keep holding the heat sink straight with one hand.

- Now you can fully tighten the screws. Once again start with one and then continue to tighten the other screws using a crossover pattern. All the while keep holding the heat sink straight with one hand.

Recommended torque for the screws: 0.6 Nm

Passive   Heatpipe   Active

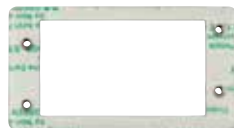PN: 052434   PN: 052433   PN: 052432


Backplate

conga-IGX Quick Start Guide

ESD Precautions

All congatec AG products are electrostatic sensitive devices and are packaged accordingly. Do not open or handle a congatec AG product except at an electrostatic-free workstation. Additionally, do not ship or store congatec AG products near strong electrostatic, electromagnetic, magnetic, or radioactive fields unless the device is contained within its original manufacturer's packaging. Be aware that failure to comply with these guidelines will void the congatec AG Limited Warranty.

Installing/removing main memory

- Technology: DDR3–1333 (CL9) / DDR3–1600 (CL11)

- Up to 16 GByte total

- Size 2, 4 or 8 GByte per module

- Unbuffered DDR3 1.5V and DDR3L 1.35V memory modules without ECC

- DDR3 memory modules PC3-10600 or PC3-12800

- Module 1 must be equipped first

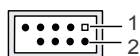| Order No.	Description
668752	Certified DDR3L Memory Module 2 GByte
668753	Certified DDR3L Memory Module 4 GByte
668754	Certified DDR3L Memory Module 8 GByte
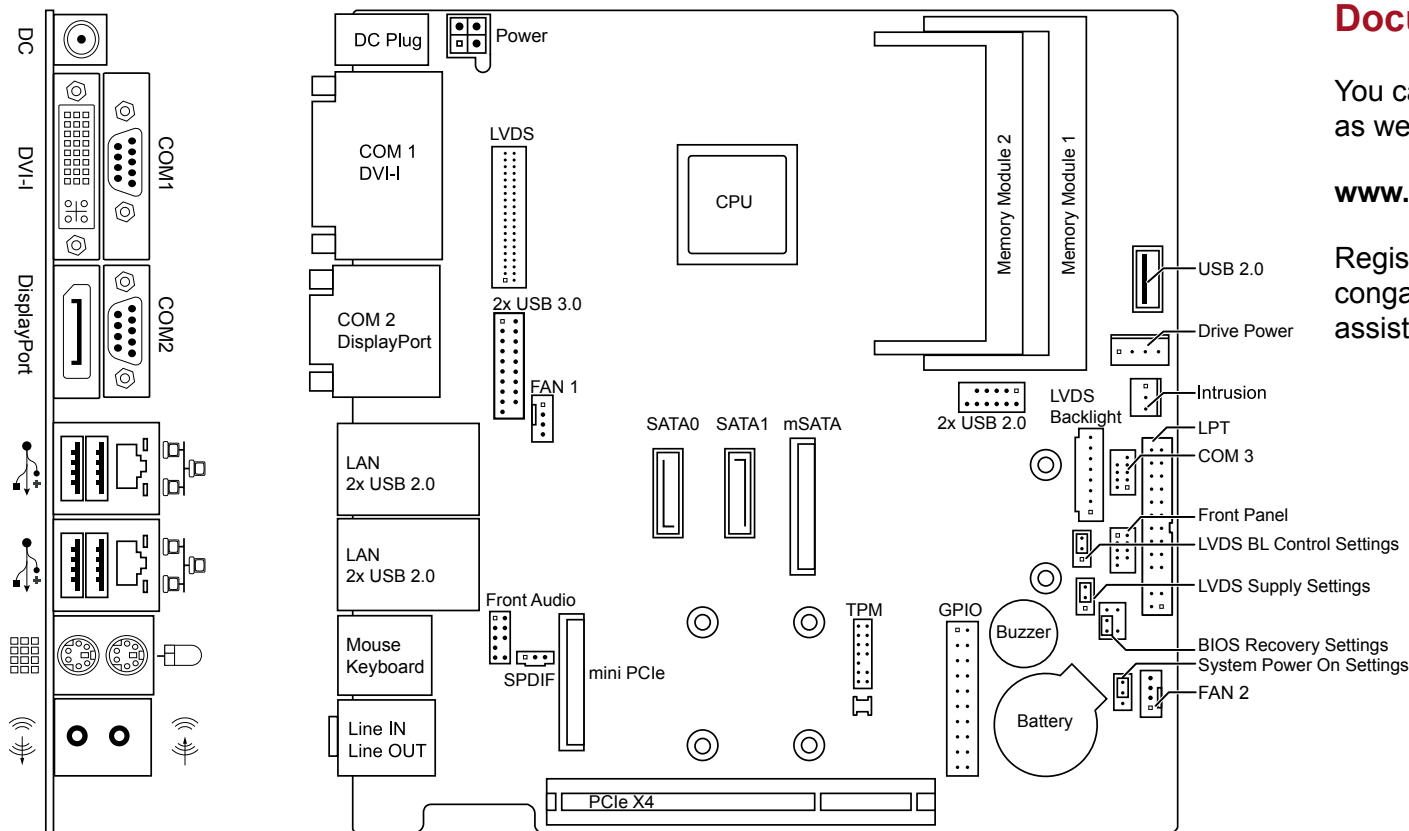
Documentation and Drivers:

You can find the complete documentation, as well as all drivers, online at

www.congatec.com/conga-igx

Registration is required. Contact your local congatec sales representative if you require assistance.

Board labels:

DC
DVI-I
DisplayPort
COM1
COM2
DC Plug
Power
COM 1 DVI-I
LVDS
2x USB 3.0
FAN 1
COM 2 DisplayPort
LAN 2x USB 2.0
LAN 2x USB 2.0
Front Audio
SPDIF
mini PCIe
Mouse Keyboard
Line IN Line OUT
CPU
Memory Module 2
Memory Module 1
SATA0 SATA1 mSATA
2x USB 2.0
USB 2.0
Drive Power
LVDS Backlight
Intrusion
LPT
COM 3
Front Panel
LVDS BL Control Settings
LVDS Supply Settings
BIOS Recovery Settings
System Power On Settings
FAN 2
TPM
GPIO
Buzzer
Battery
PCIe X4

Front Panel

1 = HDD_LED+		6 = Power_Switch
2 = Power_LED+		7 = Reset_Switch
3 = HDD_LED-		8 = Power_Switch
4 = Power_LED-		9 = Reserved
5 = Reset_Switch		

1
2

Fan 1 (CPU)
Fan 2 (Chassis)
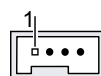
1 = GND
2 = 12 V PWM mode, 4..12 V 3-pin mode
3 = Sense
4 = PWM

1

DC Plug
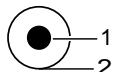
1 = + DC
2 = GND
12 V max. 60 Watt
19-24 V max. 100 Watt
Plug: 2.5 / 5.5 / 11 mm

1
2
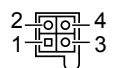
Power

1 = GND
2 = GND
3 = + DC 12 / 19-24 V
4 = + DC 12 / 19-24 V

2 4
1 3

Drive Power
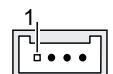
1 = Vcc 5 V max. 2 A
2 = GND
3 = GND
4 = +12 V max. 2 A

1

Jumper Settings

LVDS BL Control Settings

Analog (default)   PWM

LVDS Supply Settings

VCC 3.3 V (default)   VCC 5 V

BIOS Recovery Settings

Normal Operation (default)

BIOS Recovery / Reset to Defaults

System Power On Settings

Normal Operation (default)

Always on