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Datasheet

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conga SMC1/SMARC x86

Compact sized Carrier Board for x86 based SMARC 2.1 modules

Application Carrier Board for x86 based SMARC 2.1 Modules
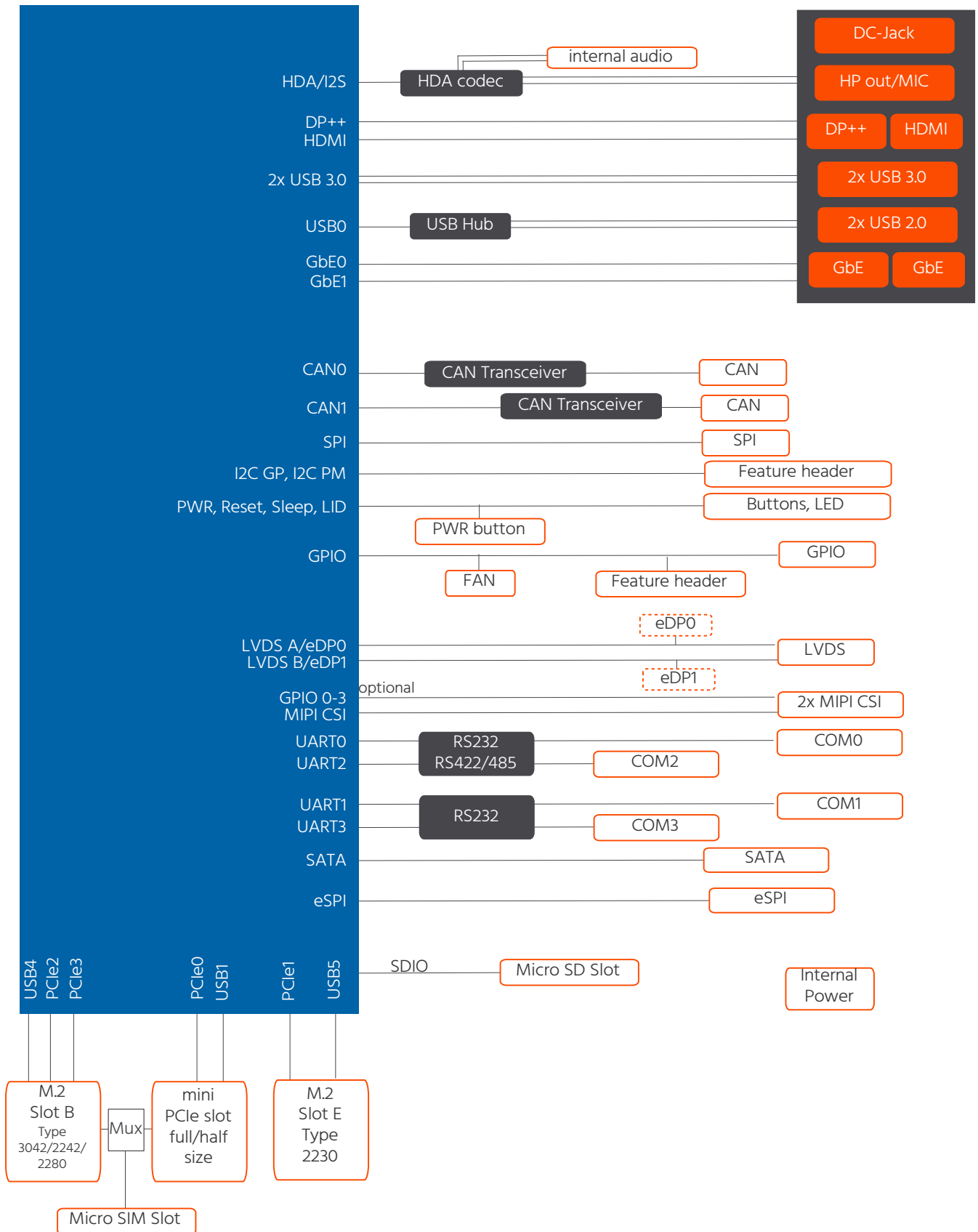
conga-SMC1/SMARC-x86

– Compact sized SMARC Carrier Board
– Support of x86 based SMARC 2.1 Modules
– Ready-to-use Carrier Board
– Platform for rapid customizing
– Support of fast implementation and improved Time-To-Market

Formfactor	3.5" Carrier Board
Board Variant	Application Carrier Board for x86 based SMARC 2.1 modules
Internal Connectors and Features	1x LVDS 18/24bit single/dual channel LVDS 2x optional eDP/DSI (dependent on processor platform) 1x LCD backlight (5V and 12V) 1x SATA Gen3 (support of SATADOM VCC PIN 7 and PIN 8) 1x SATA Power (+5V, +12V) 1x mPCIe full/half size (support for PCIe Gen3 and USB 2.0) 1x M.2 Type E 2230 (PCIe Gen3, USB 2.0) 1x M.2 Type B 3042/2242/2280 (2x PCIe Gen 3, USB 2.0) 2x MIPI-CSI 1x Micro SIM (muxed between M.2 Type B and mini PCIe) 2x RS 232/422/485 (COM 0 and COM 2 with handshake) 2x RS232 (COM 1 and COM3 TX/RX only) 2x CAN 1x Micro SD card 1x GPIO connector (up to 7 GPIO) 1x Feature connector (Batlow, Charging, GbE SDP, WD) 1x Buttons and LEDs (Power, Reset, Sleep, LID, Power LED, SATA LED) 1x Onboard power button 1x Onboard power state LED 1x SPI/eSPI header 1x I2C header 1x DMIC and analog front panel audio output 1x 12V FAN connector (4-pin) 1x RTC backup (CR2032) 1x Internal DC-In
External Connectors	2x GbE RJ45 2x USB 2.0 2x USB 3.0/3.1 1x HDMI 1x DP++ 1x Audio Jack 4-pin with HDA audio ALC888S-VD 1x External DC-In (12-24V)
Power Specification	External and internal DC-In (12-24V Wide Range Carrier Board Supply)
Operating Temperature	Operating Temp.: 0°C ... +60°C Storage Temp.: -20°C ... +70°C
Humidity	Operating Hum.: 10% - 90% r. H. non cond. Storage Hum.: 5% - 95% r. H. non cond.
Size	146 x 102 mm (approx. 5.75" x 4.02")
Order Information	PN 020751 conga-SMC1/SMARC-x86

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conga-SMC1/SMARC-x86 | Block Diagram

HDA/I2S — HDA codec — internal audio

DP++

HDMI

2x USB 3.0

USB0 — USB Hub

GbE0

GbE1

DC-Jack

HP out/MIC

DP++ HDMI

2x USB 3.0

2x USB 2.0

GbE GbE

CAN0 — CAN Transceiver — CAN

CAN1 — CAN Transceiver — CAN

SPI — SPI

I2C GP, I2C PM — Feature header

PWR, Reset, Sleep, LID — Buttons, LED

PWR button

GPIO — GPIO

FAN — Feature header

eDP0

LVDS A/eDP0 — LVDS

LVDS B/eDP1

eDP1

GPIO 0-3 optional

MIPI CSI — 2x MIPI CSI

UART0 — RS232 RS422/485 — COM0

UART2 — COM2

UART1 — RS232 — COM1

UART3 — COM3

SATA — SATA

eSPI — eSPI

USB4 PCIe2 PCIe3 PCIe0 USB1 PCIe1 USB5

SDIO — Micro SD Slot

Internal Power

M.2
Slot B
Type
3042/2242/
2280

Mux

mini
PCIe slot
full/half
size

M.2
Slot E
Type
2230

Micro SIM Slot

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