Application Carrier Board for ARM based SMARC 2.1 Modules

conga-SMC1/SMARC-ARM
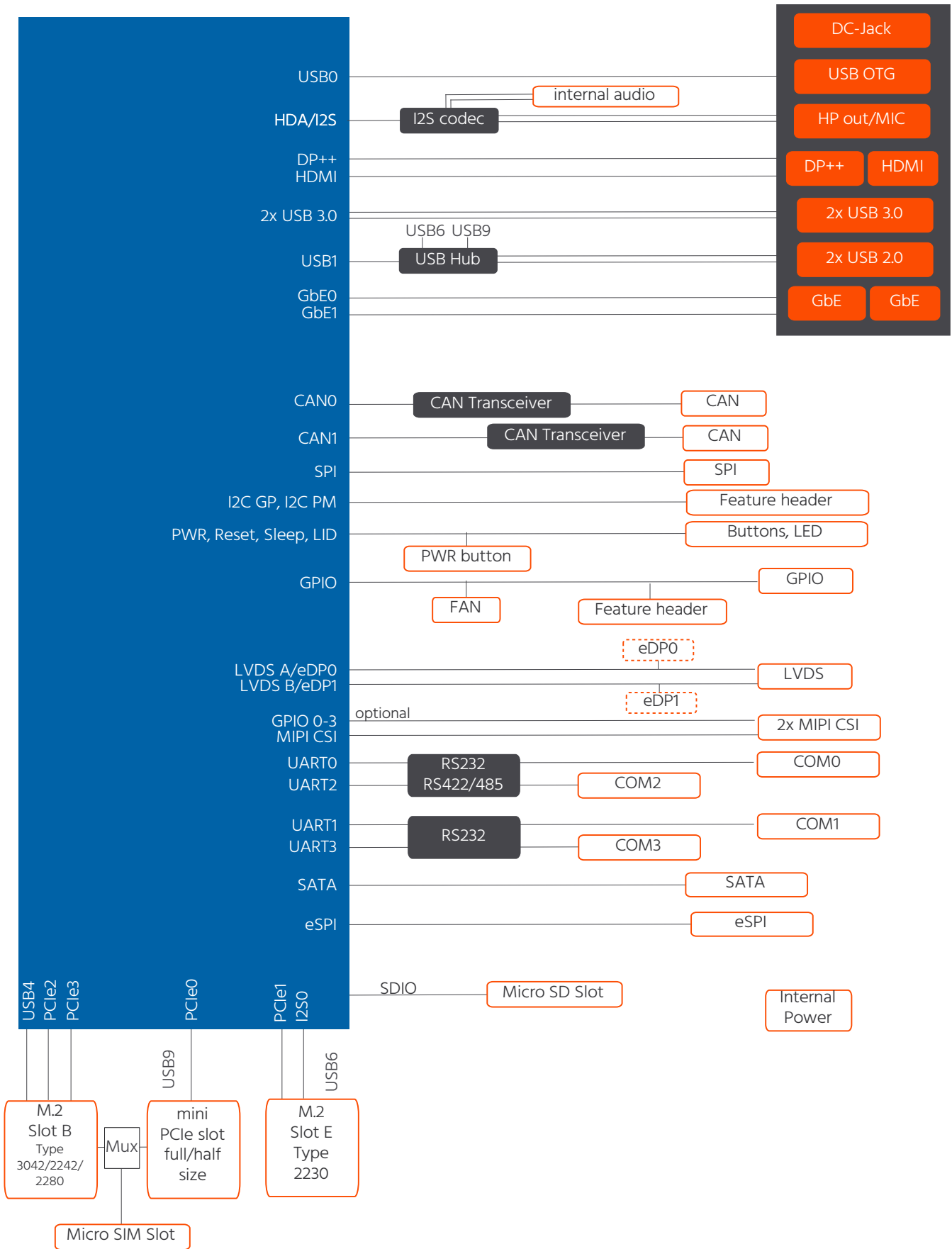

- − Compact sized SMARC Carrier Board
- − Support of ARM based SMARC 2.1 Modules
- − Ready-to-use Carrier Board
- − Platform for rapid customizing
- − Support of fast implementation and improved Time-To-Market

Formfactor	3.5" Carrier Board
Board Variant	Application Carrier Board for ARM 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, I2S, 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 8 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 1x USB 2.0 OTG 2x USB 3.0/3.1 1x HDMI 1x DP++ 1x Audio Jack 4-pin with I2S audio WM8904 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 020750 conga-SMC1/SMARC-ARM

congatec

conga-SMC1/SMARC-ARM | Block Diagram

DC-Jack

USB0

HDA/I2S — I2S codec — internal audio

USB OTG

HP out/MIC

DP++
HDMI

DP++ | HDMI

2x USB 3.0

2x USB 3.0

USB6 USB9

USB1 — USB Hub

2x USB 2.0

GbE0
GbE1

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 B/eDP1 — LVDS

eDP1

GPIO 0-3   optional
MIPI CSI — 2x MIPI CSI

UART0 — RS232 — COM0
UART2 — RS422/485 — COM2

UART1 — RS232 — COM1
UART3 — — COM3

SATA — SATA

eSPI — eSPI

USB4 PCIe2 PCIe3   PCIe0   PCIe1 I2S0   SDIO — Micro SD Slot   Internal Power

USB9   USB6

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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