DEV-KIT-SMARC

SMARC 2.0 / 2.1.1 Development Kit

Cross Platform Philosophy Development Kit for SMARC Rel. 2.0 / 2.1.1 compliant modules

STARTER KIT CONTENTS

The Development Kit contains the following material:

- Carrier board for SMARC rel. 2.0 / 2.1.1 compliant modules RB79
- Serial Adapter Cables
- 1x SATA power cable
- Main power Adapter cable
- 1x certified High Speed DP cable, DP1.4 standard compliant
- 1x certified High Speed HDMI cable, HDMI 2.0 compliant
- DP-to-HDMI adapter
- 1x eDP cable

Module not included. Must be purchased separately

CROSS PLATFORM Philosophy

SCHEMATICS PUBLICLY AVAILABLE

HDMI® HIGH-DEFINITION MULTIMEDIA INTERFACE

FEATURES OF CSM-B79

Video Interfaces	LVDS/MIPI-DSI connector, interface shared with 2x eDP connectors Backlight control + LCD selectable voltages dedicated connector 2xDP++ connectors HDMI connector (can be used in alternative to 1xDP++) 2x CSI Camera input interfaces
Mass Storage	SATA M 7p connector with dedicated power connector, interface shared with M.2 Socket 2 2230 / 2242 / 2260 Key B SSD slot microSD Card Slot
Networking	Up to 2xDual RJ-45 Gigabit Ethernet connectors M.2 Socket1 2230 Key E Slot for WiFi/BT Modules (interface shared with PCI-e x 4 slot) M.2 Socket2 2260 / 3042 Key B Slot for WWAN Modem Modules (interface shared with PCI-e x 4 slot), connected to on-board microSIM slot
USB Ports	1 x USB 3.0 type A Socket 1 x USB 2.0 type A Socket 1 x USB OTG micro-AB Socket 1 x USB 3.1 Type-C Socket
PCI-e	PCI-e x4 slot, interface shared with M.2 Slots
Audio	TRSS Mic In + Line Out Audio Jack Onboard I2S Audio Codec (TI TLV320AIC3204) + HD Audio Codec (Cirrus Logic CS4207) I2S Audio header
Serial Ports	2 x CAN ports 2 x RS-232/RS-422/RS-485 configurable serial ports on internal pin header 2 x Serial ports (Tx/Rx signals only, TTL level) on feature pin header
Other Interfaces	eSPI pin header + Flash Socket SPI pin header + Flash Socket I2C EEPROM Socket 4 x 7-segment LCD displays for POST codes Feature pin header with 2 x Serial ports, I2C, SM Bus, Watchdog and Power Management Signals GPIO / FuSa pin header FAN connector Optional Debug USB port on micro-B connector Boot selection switches JTAG connector Selector for SMARC 2.0 / 2.1 pinout compatibility
Power Supply	9-24V through dedicated Mini-Fit Jr 2x2 power connector 6-17V through 2/3/4 Cell Smart Battery Connector RTC Coin cell battery holder
Operating Temperature*	-40°C ÷ +85°C
Dimensions	243.84 x 243.84mm (microATX)

*All carrier board components must remain within the operating temperature at any and all times, including start-up; carrier operating temperature is independent of the module installed. Please refer to the specific module for more details. Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider specific cooling solutions for the final system.

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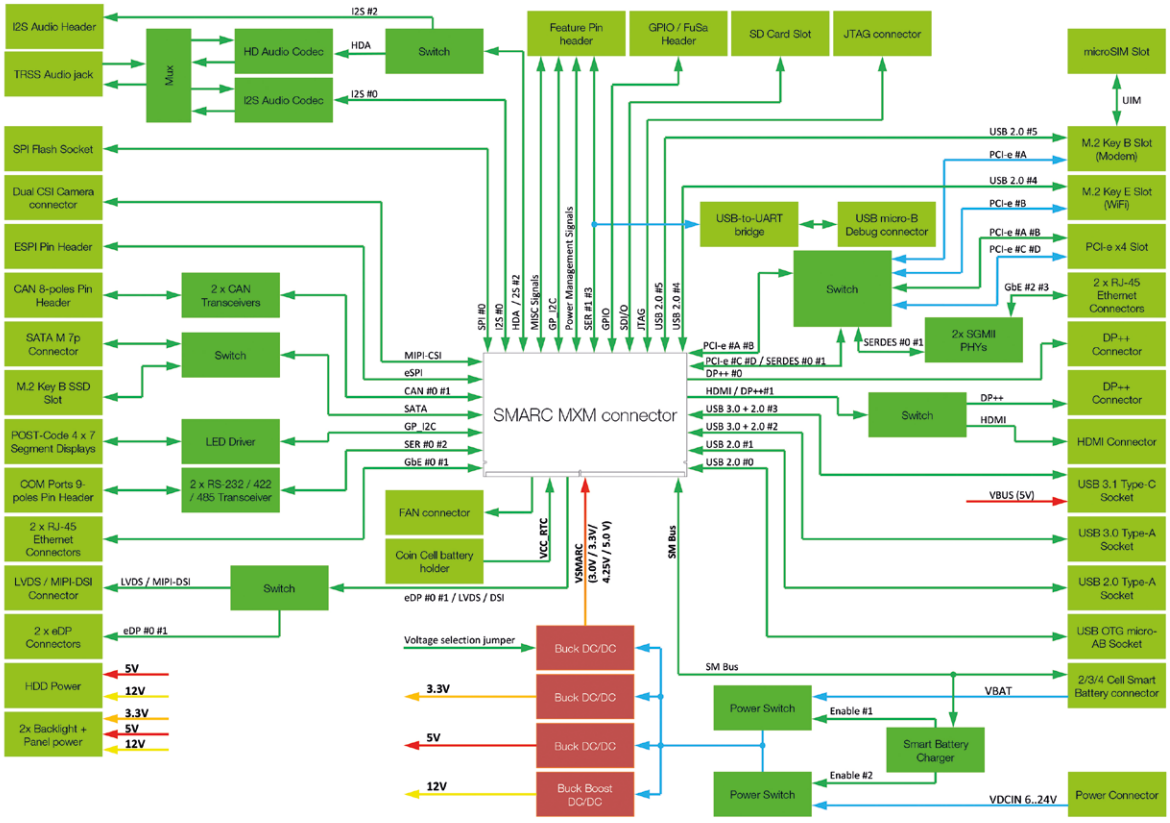
BLOCK DIAGRAM



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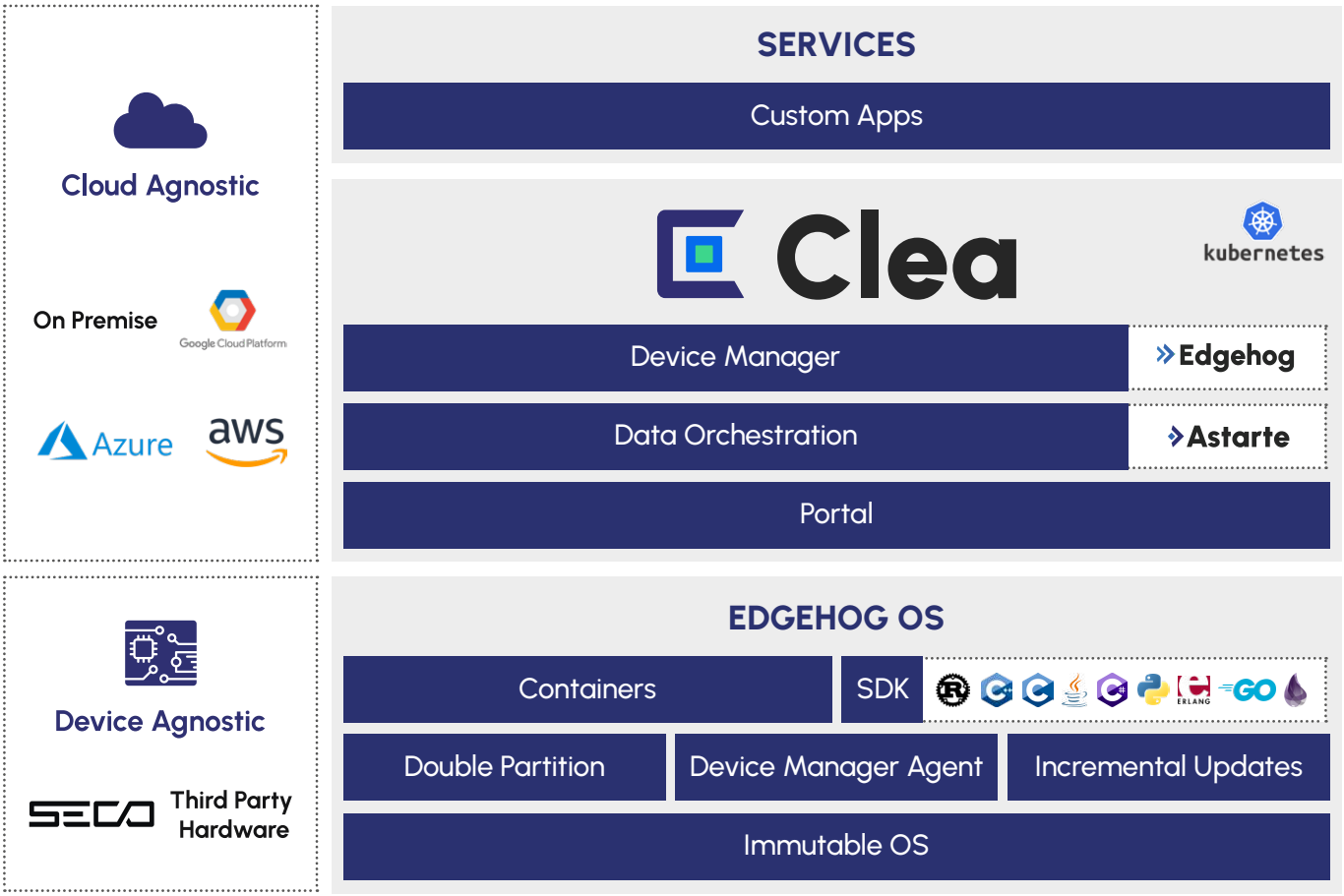

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