

Lucid MC

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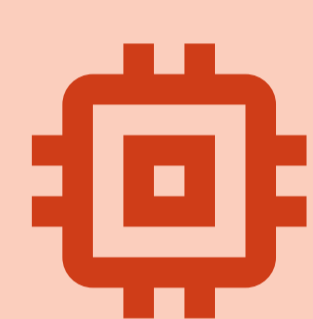
Lucid MC is a device for controlling and monitoring the operation of the device consisting of multiple units. Lucid MC exchanges data with Lucid RF and Lucid PAC modules through CAN based proprietary protocol. Communication with PC is based on Ethernet communication using Platform application. Additionally, Lucid MC monitors power supply voltages stability (e.g. 28V, 12V) and temperature (internal and external temperature values). Lucid MC can monitor and control up to 7 units, which include Lucid RF and Lucid PAC boards. Communication with PC application is based on MQTT protocol and is secured using SSL. Lucid MC is designed to meet security standards by implementing anti-tamper functions.



monitoring, controlling and configuring up to 7 sets of Lucid RF and Lucid PAC via CAN



4 communication interfaces: 3xCAN, UART over USB, Ethernet, One-Wire (DS18B20)



ARM Cortex M7
STM32F777ZIT6

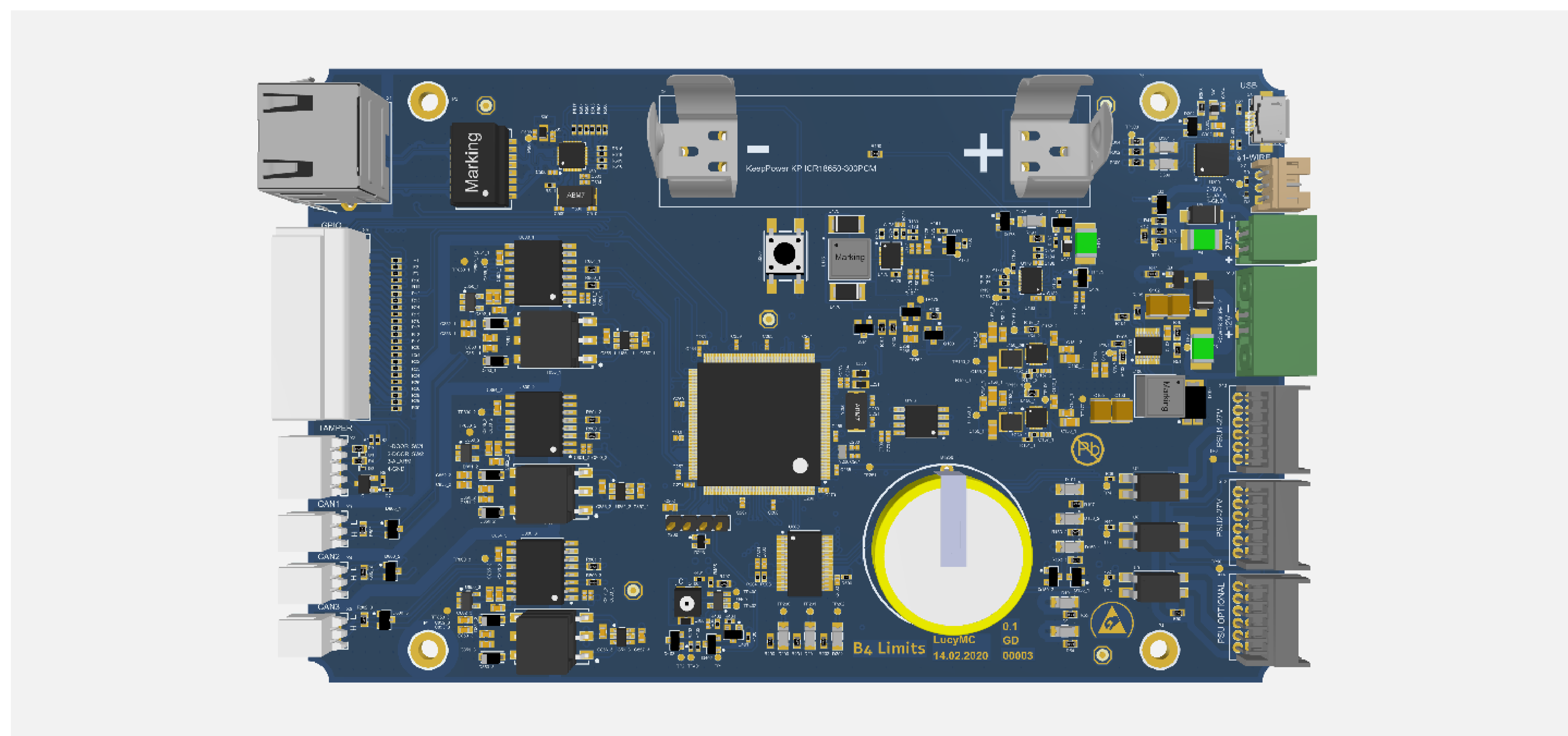


anti-tamper system

ABOUT B4 LIMITS

B4 Limits highly qualified and experienced PhD level team created our signal processing SDR platform offering full flexibility of use. Our platform can be applied for solutions ranging from vector signal generator, BTS, spectrum analyzer, jamming and repeater applications to uplink activity detection/decoding.

B4 Limits team also developed state of the art solutions around our base product: Software Defined Radio Platform. The entire range of products consists of mainly support devices: power amplifier controller, smart system controller and the heart of the system B4 Limits produced SDR.





SHORT SPECIFICATION

MAIN FEATURES	ELECTRICAL
MQTT over SSL client through Fast Ethernet (10/100 Mbps)	Supply voltage: 12 V
CAN-based proprietary protocol master controller	Maximum current consumption: 1 A
monitoring, controlling and configuring up to 7 sets of Lucid RF and Lucid PAC via CAN	Voltage levels of digital signals: 1.8 V, 3.3 V, 5 V
UART over USB for monitoring and configuring	Analog voltage measurement: 28 V and 12 V
controlling up to 3 power supplies (switching on/off, monitoring voltage, monitoring digital DC_OK input signal)	Communication interfaces: for external communication: FastEthernet 10/100 Mbps for internal communication: CAN for configuring and monitoring: UART over USB for debugging: SWD (internal)
measurement of supply voltages and temperature	for ambient temperature sensor: One-Wire (DS18B20)
additional 21 GPIO pins with configurable voltage levels (1.8V, 3.3V, 5V)	
support for DS18B20 temperature external sensor	
embedded real time clock	MECHANICAL
anti-tamper system	PCB dimensions (L x W): 159 x 100 mm
	Housing dimensions (L x W x H): 169 x 110 x 38 mm
4 communication interfaces: 3xCAN, UART over USB, Ethernet, One-Wire (DS18B20)	ENVIRONMENTAL
	Operating temperature: -25 to 85 °C

Lucid MC

