

General:

- Input voltage: 6-36v (Dual redundant regulators)
- Dimensions: 45x65x28mm (WxLxH)
- 20x20 & 25x25mm Mounting holes
- Onboard locking Micro-SD slot for logging
- Onboard Buzzer
- Onboard RGB LED for status
- FRAM for parameter & mission storage

Computer specs & interfaces:

- 4GB / 8 GB RAM
- 32 / 64 GB FLASH (Onboard EMMC)
- 4x Arm Cortex-A76 Cores @2.4GHz
- Built-in WiFi & Bluetooth
- 1x USB 2.0
- 2x USB 3.0
- 2x MIPI CSI-2
- Gigabit Ethernet
- µHDMI Output
- PCI-E for AI Accelerators, SDRs, storage etc
- 14 GPIOs

Sensors:

- Triple low-drift IMUs (3x Gyros, 3x Accelerometers)
- High precision barometer
- Dedicated 3 axis magnetometer
- Temperature sensor for drift compensation

Flight controller Interfaces:

- 6x UART
- 8x Motor outputs (DSHOT, PWM, OneShot)
- CAN Bus
- I2C
- Analog board + battery voltage & current sensing
- Safety switch input
- RC Input

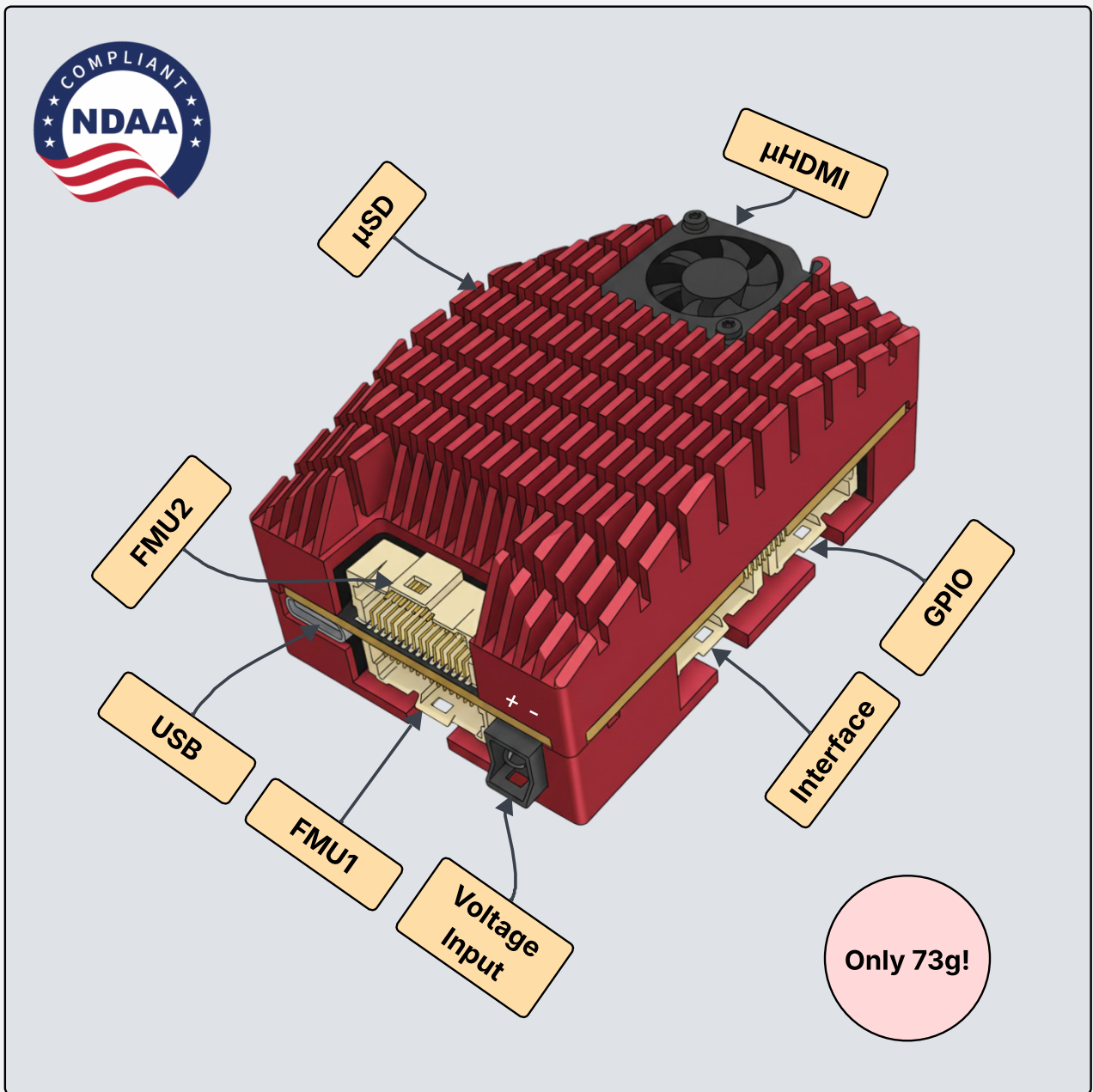
Supported flight stacks:



Ships by default

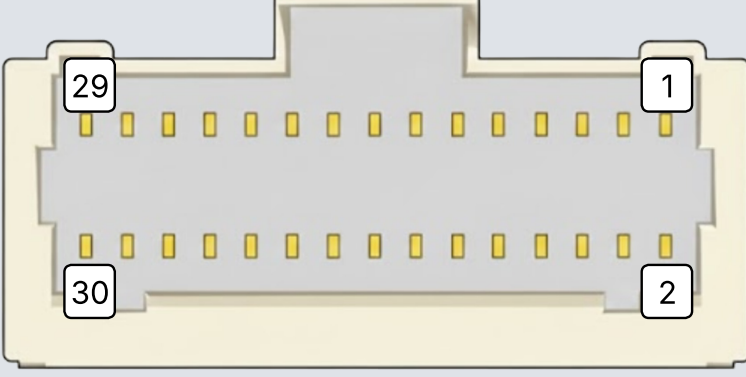


Optional



Flight Controller connectors

J1 - FMU1			
CH1	1	2	GND
CH2	3	4	GND
CH3	5	6	GND
CH4	7	8	TX6 / MOSI
CH5	9	10	RX6 / CS
CH6	11	12	CTS6 / SCK
CH7	13	14	RTS6 / MISO
CH8	15	16	FMU_VDD_3V3
TX7	17	18	SAFETY_SWITCH_IN
RX7	19	20	GND
GND	21	22	GND
5V Main	23	24	BATT_VOLT
CAN_H	25	26	BATT_CURR
CAN_L	27	28	VDD_5V_BRICK
GND	29	30	VDD_5V_BRICK



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Motor Outputs

UARTs

CAN Bus

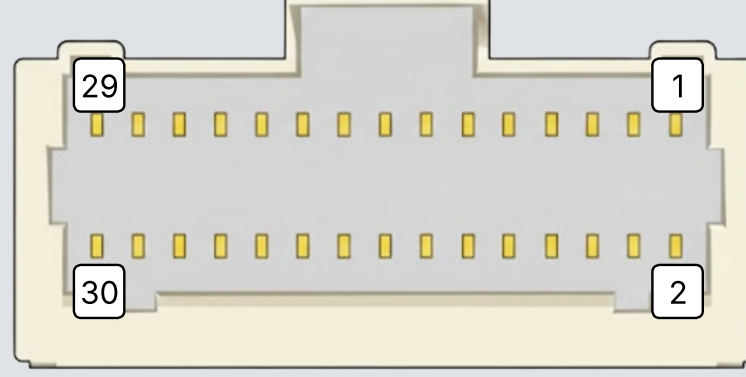
FMU 3.3V output

5V Main output

Analog inputs

*Optional power brick input for FMU Backup

J2 - FMU2			
3.3V Receiver	1	2	5V Main
RC INPUT	3	4	TX3
RSSI IN	5	6	RX3
GND	7	8	CTS3
3.3V Receiver	9	10	RTS3
TX8 / Frsky_OUT	11	12	GND
RX8 / Frsky_IN	13	14	5V Main
GND	15	16	TX2
5V Main	17	18	RX2
TX4	19	20	CTS2
RX4	21	22	RTS2
SCL1	23	24	GND
SDA1	25	26	VBUS
GND	27	28	FMU USB D-
GND	29	30	FMU USB D+



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I2C

UARTs

FMU USB

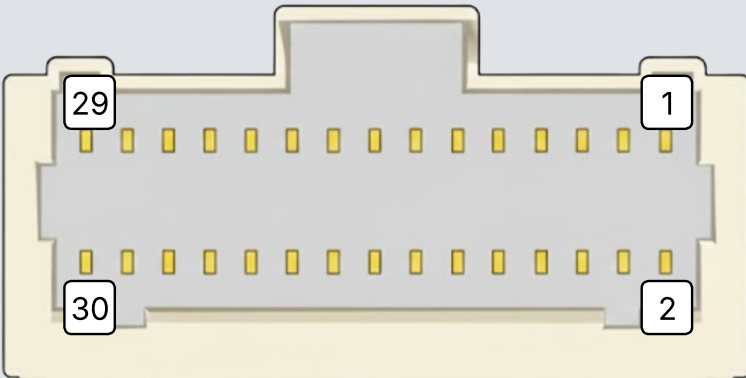
FMU 3.3V output

5V Main output

Misc.

Companion Computer connectors

J3 - Interface			
USB OTG	1	2	5V_REG
CM USB D-	3	4	GND
CM USB D+	5	6	ETH Status
GND	7	8	ETH Link
PCIe_CLK_nREQ	9	10	ETH0_N / TX-
PCIe_RST	11	12	ETH0_P / TX+
GND	13	14	ETH1_N / RX-
PCIe_CLK_P	15	16	ETH1_P RX+
PCIe_CLK_N	17	18	ETH2_N
GND	19	20	ETH2_P
PCIe_RX_P	21	22	ETH3_N
PCIe_RX_N	23	24	ETH3_P
VIN	25	26	GND
PCIe_TX_P	27	28	VIN
PCIe_TX_N	29	30	A/V OUT (CM4 Only)



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Ethernet

Battery voltage

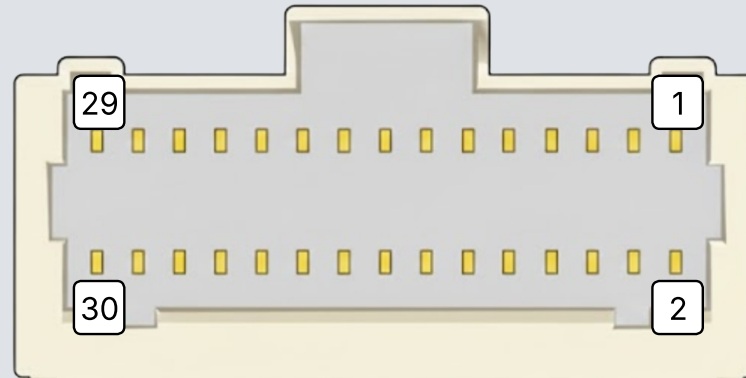
USB

PCIe

5V Main output

Misc.

J4 - GPIO			
GND	1	2	GND
GPIO13	3	4	GPIO21
GPIO11	5	6	GPIO20
USB1 D-	7	8	GPIO16
USB1 D+	9	10	GPIO12
GND	11	12	GPIO7
USB3 0_RX_N	13	14	GPIO8
USB3 0_RX_P	15	16	GPIO25
USB3 0_DP	17	18	GPIO10
USB3 0_DM	19	20	GPIO23
USB3 0_TX_N	21	22	GPIO18
USB3 0_TX_P	23	24	CM_RX
GND	25	26	CM_TX
GPIO3	27	28	5V Secondary Output
GPIO2	29	30	3.3V Secondary output



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GPIOs

UART

USB

5V Secondary output

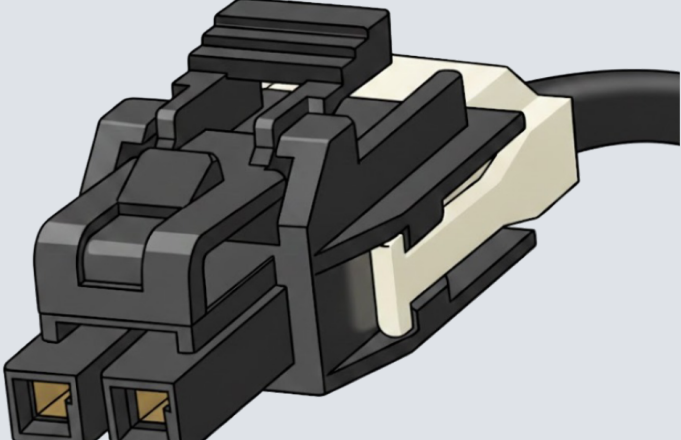
3.3V Secondary output

Ground

*CM UART is connected to the FC (UART4 / Serial3 on FC)

*Low current output (up to 300mA)

J5 - Power input	
1	VIN
2	GND



Molex Nano-fit 45130-0201

Input voltage: 6-36v (2-8s)
Power draw: ~12W @ Full load, ~2.7W @ Idle

Connectors		
Designator	Type	Part number
J1,J2,J3,J4	Molex Pico-Clasp	501189-3010
J5	Molex Nano-Fit	45130-0201

UART Map		
Hardware UART	Serial port	Recommended function
UART2	Serial1	Main telemetry
UART3	Serial2	GPS module
UART4	Serial3	Companion computer
UART6	Serial4	Secondary telemetry
UART7	Serial5	ESC Telemetry
UART8	Serial6	RC Receiver

→ UART4 is connected to the companion computer by default