

ANT-1776UAV

Specification

Rev : 1.1a



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Overview

The hardware specifications for the Jupiter-Ai board are the following:

- Quad-Core ARM® Cortex A53 processor up to 1.8GHz per core
- 4GB LPDDR4 @ 4000MHz
- 32GB eMMC storage on Board
- 2 camera ports (HDMI and CVBS)
- Multi-stream-capable HD video engine delivering H.265/4 1080p60 decode,1080p60 encode
- Hailo-8 AI processor opt in mezzanine
- Analog Audio (mic/Line-in and Speaker)
- Ethernet 1000Mbps
- USB3.0 OTG
- 2x UART interface
- General Purpose I/O for Device Control

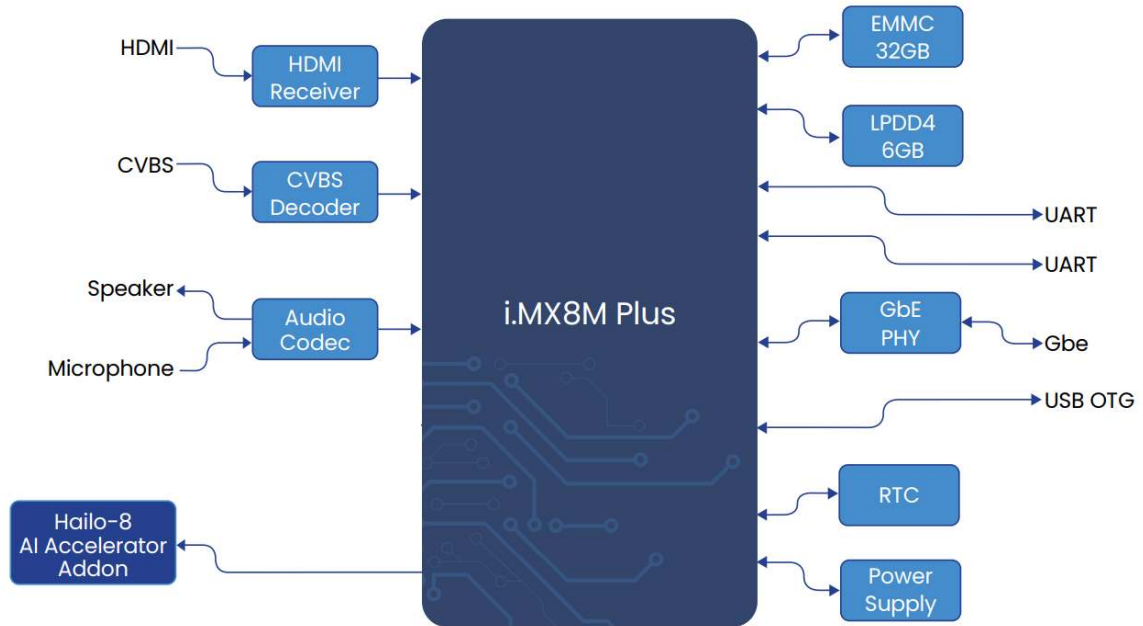
Electrical Characteristics

Parameter	Min	Typ	Max	Unit
Main Input Voltage	5	12	14	V
Power Consumption	-	3.5	-	W
Operating Temp	-40		+85	C
CPU Clock	-	1.6	-	GHz

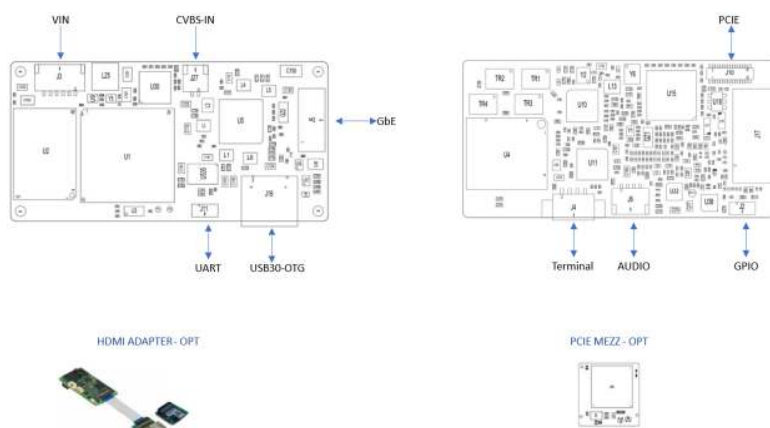
Connector Details

REF	COMPANY MANUFACTURING	PN	NOTE
J3	JST	SM06B-SRSS-TB	POWER
J2	JST	SM04B-XSRS	UART/GPIO USER
J5	JST	SM08B-SRSS-TB	ETHERNET
J6	JST	SM04B-SRSS-TB	AUDIO
J4	MOLEX	53261-0471	Terminal
J16	JAE Electronics	DX07S024JA2R1200	USB30 OTG
J11	JST	SM04B-XSRS	UART_USER
J10	Hirose	DF40C-30DP-0.4V	PCIE
J27	JST	SM02B-SRSS	CVBS-IN

Block Diagram

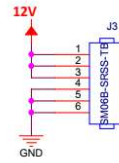


Jupiter-Drone



Pinout

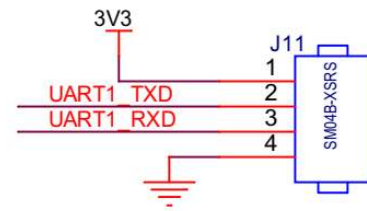
J3 POWER	
Pin Number	Signal
1-3	VIN
4-6	GND



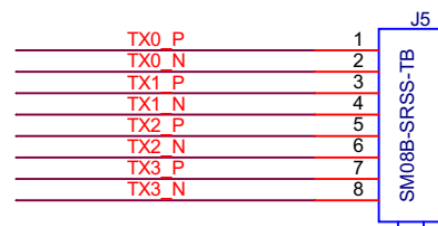
J2 UART/GPIO	
Pin Number	Signal
1	ON/OFF
2	GPIO1/UART3_TX (tty2)
3	GPIO2/UART3_RX(tty2)
4	GND



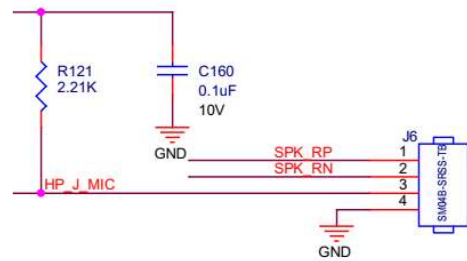
J11 UART	
Pin Number	Signal
1	3V3
2	TXD
3	RXD
4	GND



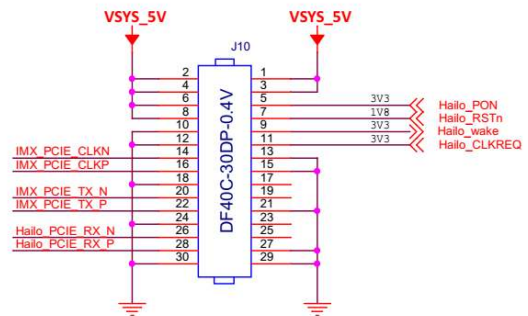
J5 ETHERNET	
Pin Number	Signal
1	TX0_P
2	TX0_N
3	TX1_P
4	TX1_N
5	TX2_P
6	TX2_N
7	TX3_P
8	TX3_N



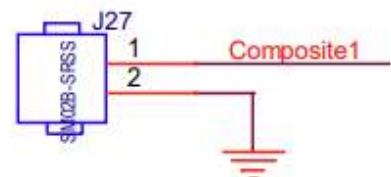
J6 AUDIO	
Pin Number	Signal
1	SPEAKER_P
2	SPEAKER_N
3	MIC1
4	GND



J10 PCIE			
Pin Number	Signal	Pin Number	Signal
1	5V	2	5V
3	5V	4	5V
5	PON	6	5V
7	RSTn	8	5V
9	WAKE	10	GND
11	CLKREQ	12	GND
13	GND	14	CLK_N
15	GND	16	CLK_P
17	N.C	18	GND
19	N.C	20	TX_N
21	GND	22	TX_P
23	N.C	24	GND
25	N.C	26	RX_N
27	GND	28	RX_P
29	GND	30	GND



J27 CVBS	
Pin Number	Signal
1-3	VIN
4-6	GND



Mounting

The overall dimensions of the Jupiter-Drone board are 50x25mm.

