mosaic−X5

Mosaic−X5

U1
mosaic-X5

Not Connected

Power
+3V3
VDD_3V3_1
VDD_3V3_2
VDD_3V3_3
VDD_3V3_4
VDD_3V3_5
VDD_3V3_6
VDD_3V3_7
VDD_3V3_8
VDD_3V3_9
+3.3V
VDD_BAT

Antenna
VTUNE
REF_I
REF_O
2V8_IN
2V8_OUT
VANT2
VANT1
ANT_2
ANT_1

System
RTC_XTALO
RTC_XTALI
PMIC_ON_REQ
ONOFF
nRST_IN

SD
SD_DAT0
SD_CMD
SD_CLK

Indicators
GPLED
MODULE_RDY

GPIO
LOGLED
LOGBUTTON
GP2
GP1

Greco Timing
1V8_OUT
SYNC
PPSO
Reserved_GND
EVENTB
EVENTA

USB device
USB_VBUS1
USB_DEV_P
USB_DEV_N

Com
RXD4
TXD4
RTS1
CTS1
RXD1
TXD1
RTS2
CTS2
RXD2
TXD2
RTS3
CTS3
RXD3
TXD3

Ethernet
nRST_LAN
RMII_CRSDV
RMII_RXER
RMII_RXD1
RMII_RXD0
RMII_CLK
RMII_TXEN
RMII_TX1
RMII_TX0
MDIO
MDC

Voltage regulator
U2
LD1117AS33TR
USB_V
RPI_P5V
External_5V
D1 MBRX120LF-TP
D2 MBRX120LF-TP
MBRX120LF-TP
+5V
+3.3V
C1 100nF
C2 10uF

Antennas
ANT1
J1 Conn_Coaxial
L1 39nH
C3 100nF
L2 39nH
ANT2
J2 Conn_Coaxial
D9 D_TVS

MicroUSB
J3 USB_B_Micro
FL1 ECMF02-2AMX6
USB_P
USB_N

Raspberry Pi connector
J4
raspberrypi_hat_GX40HAT
RPI_P5V
MosaicRX1
MosaicTX1

PPS & Events
+1V8
+3.3V
C4
C5 100nF
U3 SN74AVC4T245PW
EVENTA_1V8
EVENTB_1V8
PPSO_1V8
EVENTA_3V3
EVENTB_3V3
PPSO_3V3
J5 Conn_01x04_Male

Connectors
MosaicRTS2
MosaicTX2
MosaicRX2
FTDI_PWR
MosaicCTS2
JP2 Jumper_NC_Dual
+3.3V
VANT
JP1 Jumper_NC_Dual
+3.3V
J6 Conn_01x06_Male
J7 Conn_01x02_Male
External_5V
U4 SN74LVC1G126DRLR
MODULE_RDY
MosaicRX1_BufferOUT

Fiducials
FID1 Fiducial
FID2 Fiducial
FID3 Fiducial
FID4 Fiducial

LEDs
+3.3V
R1 R330
D4 LED
R2 R330
D5 LED
PPSO_3V3
R3 R330
D6 LED
RPI_GP1
R4 R330
D7 LED
RPI_GP2
R5 R330
D8 LED
GPLED

mosaicHAT.
An open source GNSS HAT for Raspberry Pi

Sheet: /
File: HATv1.0.sch
Title: mosaicHAT
Size: A2   Date: 6 October 2020   Rev: v1.0
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