SECHZIG

U2
MACHDYNE-MODULE-60P

PWR5V0
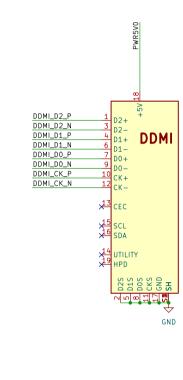PWRIO
GND
SYS_PG
SYS_RST_N
PMOD_A2
PMOD_A3
PMOD_A4
ETH_TXD
ETH_TX1
ETH_RXD
ETH_RX1
ETH_CRS_DV
ETH_TXEN
ETH_RST_N
ETH_CLK50
SD_CD
UART_TX
GND
SD_SCK
SD_SS
SD_MOSI
SD_DI
SD_D2
JTAG_TMS
JTAG_TDI
JTAG_TDO
JTAG_TCK

PWR5V0
PWR3V3
GND
USB0_DN
USB0_DP
DDMI_CK_N
DDMI_CK_P
DDMI_D0_N
DDMI_D0_P
DDMI_D1_N
DDMI_D1_P
DDMI_D2_N
DDMI_D2_P
USBH0_DN
USBH0_DP
GND
USBH1_DN
USBH1_DP
GND
SYS_CLK48
XA
XB
XC
XD
DS0_N
DS0_P
DS1_N
DS1_P
DS2_N
DS2_P

SUPERVISOR

Y1
ECS-80-12-33-JGN-TR-12MHZ

Q4
RP2040

MUST USE 2.5V/3.3V FLASH

U5
W25Q32JVSS

RP_QSPI_SS
RP_QSPI_SCK
RP_QSPI_IO0
RP_QSPI_IO1
RP_QSPI_IO2
RP_QSPI_IO3

JTAG_TCK
JTAG_TDO
JTAG_TDI
JTAG_TMS
GND
PWRIO

SWCLK
SWD
XIN
XOUT

AUDIO

U5
PMOD_A1   AUD_OPTICAL

VIDEO

DDMI
DDMI_D2_P
DDMI_D2_N
DDMI_D1_N
DDMI_D1_P
DDMI_D0_N
DDMI_D0_P
DDMI_CK_N
DDMI_CK_P

J9
DDMI_A

ETHERNET

U1
LAN8720A

ETH_TXD
ETH_TX1
ETH_TXEN
ETH_RXD
ETH_RX1
ETH_CRS_DV
ETH_RST_N
ETH_CLK50

TXD0
TXD1
TXEN
RXD0/MODE0
RXD1/MODE1
RXER/PHYAD0
CRS_DV/MODE2
MDIO
MDC
RST
INT/REFCLKO
XTAL1/CLKIN
XTAL2

LED1/REGOFF
LED2/nINTSEL

REGOFF has internal pull-down,
which enables internal 1.2V regulator
nINTSEL has internal pull-up,
which selects REF_CLK in mode

J3
HR911105A

Green LED
Yellow LED

LED1
LED2

SHIELD

SD CARD

J4
MICROSD

SD_D2
SD_SS
SD_MOSI
SD_SCK
SD_MISO
SD_D1
SD_CD

DAT2
DAT3/CD
CMD
VDD
CLK
VSS
DAT0
DAT1
DET_B

POWER

U8
TLV62568DDC

L1
INDUCTOR

$0.8 \times (1 + (200/44.2)) = 3.3149$

PWR5V5
PWR3V3
TP2
TP_PWR3V3

USB POWER/CONFIG DEVICE (RP2040)

USBRPC_DP
USBRPC_DN

USBRP_DP
USBRP_DN

J1
TYPE-C-31-M-12-FIXED

USBRPC_DP
USBRPC_DN

FB1
Ferrite_Bead

PWR5V0UF
TP1
TP_PWR5V0

USB HOST

J2
USB_A_Stacked

FB3
Ferrite_Bead

USBH0_P
USBH0_N
USBH1_P
USBH1_N