rp2040 Crystal

ABLS-12.0000MHZ-B4-T
C? 27p
Y?
R? 1k
C? 27p
XIN
XOUT
GND

rp2040 FLASH

+3V3
R? DNF
C? 100n
GND
J? Conn_01x02
R? 1k
USB_BOOT
QSPI_SS
QSPI_SCLK
GND

VCC 8
CS 1
CLK 6
DI(IO0) 5
DO(IO1) 2
IO2 3
IO3 7
GND 4
QSPI_SD0
QSPI_SD1
QSPI_SD2
QSPI_SD3
U?
W25Q128JVS
GND

rp2040 Power Supply

VBUS
+3V3
U?
NCP1117-3.3_SOT223
VI VO
GND
C? 10u
C? 10u
GND
GND
GND

NEO-8Q

+3.3V
C? 100n
GND
NEO_SPI_MISO
NEO_SPI_MOSI
NEO_SPI_CS_BAR
NEO_SPI_CLK
NEO_RST_B

USB_DM
USB_DP
VCC
V_BCKP
VDD_USB
VCC_RF
TXD/SPI_MISO 20
RXD/SPI_MOSI 21
SDA/SPI_CS 18
SCL/SPI_CLK 19
EXTINT 4
SAFEBOOT 1
RESET 8
D_SEL 2
LNA_EN 14
RF_IN 11
TIMEPULSE 3
GND
U?
GND

RP2040

+1V1
+3.3V
C? 100n
C? 100n
C? 100n
C? 100n
C? 100n
C? 100n
C? 100n
C? 100n
C? 100n
GND
GND
C? 1u
C? 1u
GND
GND

QSPI_SS
QSPI_SD0
QSPI_SD1
QSPI_SD2
QSPI_SD3
QSPI_SCLK

DVDD DVDD VREG_VOUT VREG_IN IOVDD IOVDD IOVDD IOVDD IOVDD IOVDD ADC_AVDD USB_VDD
QSPI_SS 56
QSPI_SD0 53
QSPI_SD1 55
QSPI_SD2 54
QSPI_SD3 51
QSPI_SCLK 52

USB_DP 47
USB_DM 46

Raspberry Pi
RP2040
U?

GPIO0 2
GPIO1 3
GPIO2 4
GPIO3 5
GPIO4 6
GPIO5 7
GPIO6 8
GPIO7 9
GPIO8 11
GPIO9 12
GPIO10 13
GPIO11 14
GPIO12 15
GPIO13 16
GPIO14 17
GPIO15 18
GPIO16 27
GPIO17 28
GPIO18 29
GPIO19 30
GPIO20 31
GPIO21 32
GPIO22 34
GPIO23 35
GPIO24 36
GPIO25 37
GPIO26_ADC0 38
GPIO27_ADC1 39
GPIO28_ADC2 40
GPIO29_ADC3 41

XIN 20
XOUT 21
RUN 26
SWCLK 24
SWD 25
TESTEN 19
GND 57

R? 27.4
R? 27.4
R?
USB_D+
USB_D-

NEO_SPI_MISO
NEO_SPI_CS_BAR
NEO_SPI_CLK
NEO_SPI_MOSI
Sim800L_RXD
Sim800L_TXD
Sim800L_DTR

EEPROM_CS
EEPROM_SCK
EEPROM_MOSI
EEPROM_MISO

NEO_RST_B
Sim800L_RST

PWR_LOW_INT
MAX17043_SDA
MAX17043_SCL

XIN
XOUT
RUN
SWCLK
SWD
GND
GND

MAX17043

VBUS
R? 1k
R? 150
R? 4.7k
C? 1u
CELL
VDD
ALRT_B
QSTRT
CTG
GND
SDA
SCL
U?
GND
C? 10n
GND
PWR_LOW_INT
MAX17043_SDA
MAX17043_SCL

SIM800L

VBUS
Sim800L_RST
Sim800L_RXD
Sim800L_TXD

Net 1
Vcc 2
RST 3
RXD 4
TXD 5
GND 6
RING 7
DTR 8
MIC+ 9
MIC- 10
SPKR+ 11
SPKR- 12
GSM_Module?
GND
Sim800L_DTR

USB_B_Micro

J?
VBUS
VBUS 5
D+ 3
D- 2
ID 4
Shield
GND 1
GND 6
USB_D+
USB_D-
GND

SSTPF040C

+3.3V
U?
EEPROM_CS
EEPROM_MISO
CE 1
SO 2
WP 3
VSS 4
VDD 8
HOLD 7
SCK 6
SI 5
EEPROM_SCK
EEPROM_MOSI
GND