Quick Reference
M93053

Board Layout

Top View
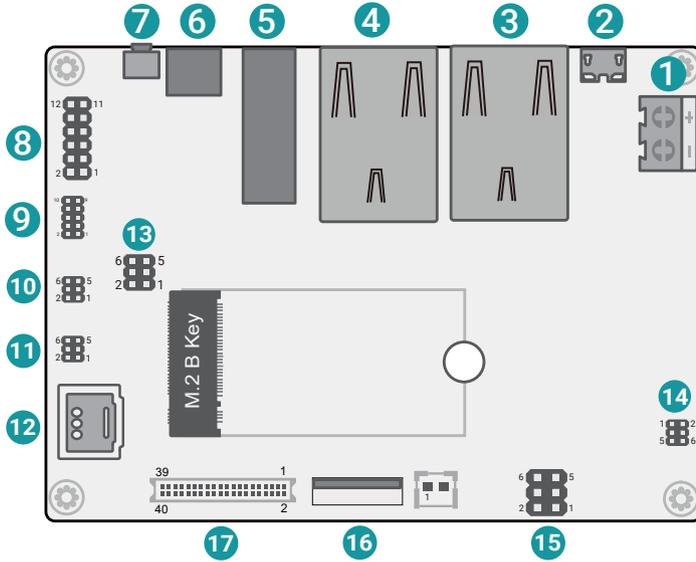
1	Power DC in	9	USB2.0
2	Micro USB 2.0 (OTG)	10	I2C Touch
3	LAN (CN1, ETH1)	11	Front Panel
4	LAN (CN2, ETH0)	12	Nano SIM Slot
5	HDMI	13	Boot Mode Select
6	COM3 (RS-485)	14	SPI
7	Download Mode Switch	15	Backlight Power Select
8	COM5 (RS-232) & COM4 (RS-232/424/485)	16	MIPI-CSI
		17	LVDS

Bottom View
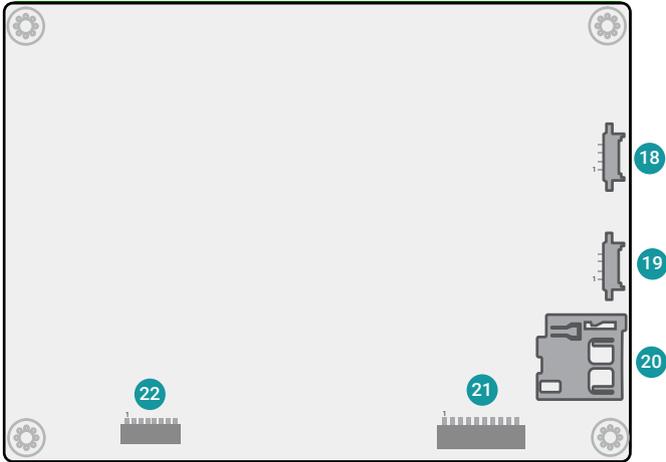
18	CAN Bus
19	UART Debug
20	uSD Card
21	Digital I/O
22	LCD BackLight Power

Jumper Settings

13 Boot Mode Select	JP1
Serial Download	1-2 On
EMMC BOOT (Default)	3-4 On
SD BOOT	5-6 On

15 Backlight Power Select	BLJP1
3V3	1-2 On
5V (Default)	1-3 On
5V	4-6 On
12V (Default)	5-6 On

PIN Assignment

6 ▶ COM3 (TSCN1)

Pin	Assignment
1	DATA-
2	DATA+

18 ▶ CAN Bus (CBCN1)

Pin	Assignment
1	5V
2	CAN1H
3	CAN1L
4	GND

22 ▶ LCD BackLight Power (BLJ1)

Pin	Assignment
1	DIMMING
2	GND
3	BLONOFF
4	GND
5	GND
6	12V/5V
7	12V/5V
8	12V/5V

4 ▶ I2C Touch (TPJP1)

Pin	Assignment	Pin	Assignment
1	3V3	2	GND
3	SCL	4	ALERT
5	SDA	6	RST

11 ▶ Front Panel (FPJP1)

Pin	Assignment	Pin	Assignment
1	ONOFF	2	3V3
3	GND	4	GPIO
5	SYS_nRST	6	SYS_ON#

21 ▶ DIO (TSJ1)

Pin	Assignment
1	DIO0
2	DIO1
3	DIO2
4	DIO3
5	DIO4
6	DIO5
7	DIO6
8	DIO7
9	5V
10	GND

14 ▶ SPI (SPJP1)

Pin	Assignment	Pin	Assignment
1	SPI_SCLK	2	3V3
3	SPI_MOSI *MOSI is actually SOUT	4	SPI_SS0
5	SPI_MISO *MISO is actually SIN	6	GND

17 ▶ LVDS (DPJ1)

Pin	Assignment	Pin	Assignment
1	GND	2	GND
3	LVDS_A0-	4	NC
5	LVDS_A0+	6	NC
7	GND	8	GND
9	LVDS_A1-	10	NC
11	LVDS_A1+	12	NC
13	GND	14	GND
15	LVDS_A2-	16	NC
17	LVDS_A2+	18	NC
19	GND	20	GND
21	LVDS_A3-	22	NC
23	LVDS_A3+	24	NC
25	GND	26	GND
27	LVDS_A_CLK-	28	NC
29	LVDS_A_CLK+	30	NC
31	GND	32	GND
33	GND	34	GND
35	3V3	36	5V
37	3V3	38	5V
39	3V3	40	5V

9 ▶ USB2.0 (UBJ2)

Pin	Assignment	Pin	Assignment
1	5V	2	5V
3	D-	4	D-
5	D+	6	D+
7	GND	8	GND
9	NC	10	GND

8 ▶ COM5 & COM4 (TSJP1)

* COM5 and COM4 share a common pin header while remaining functionally isolated.

Function	Pin	RS-232	RS-422	RS-485
COM5	1	RS232_SINN	-	-
	2	RS232_RTSN	-	-
	3	RS232_SOUTN	-	-
	4	RS232_CTSN	-	-
GND	5	GND	GND	GND
GND	6	GND	GND	GND
COM4	7	-	COMB_DCDN (TX-)	COMB_DCDN (DATA-)
	8	COMB_SINN	COMB_SINN (TX+)	COMB_SINN (DATA+)
	9	COMB_RTSN	-	-
	10	COMB_SOUTN	COMB_SOUTN (RX+)	-
	11	COMB_CTSN	-	-
	12	-	COMB_DTRN (RX-)	-