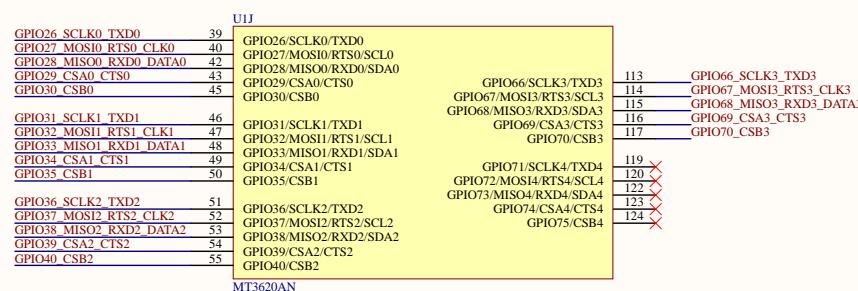
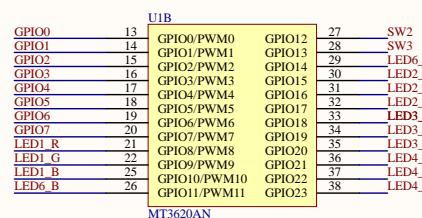


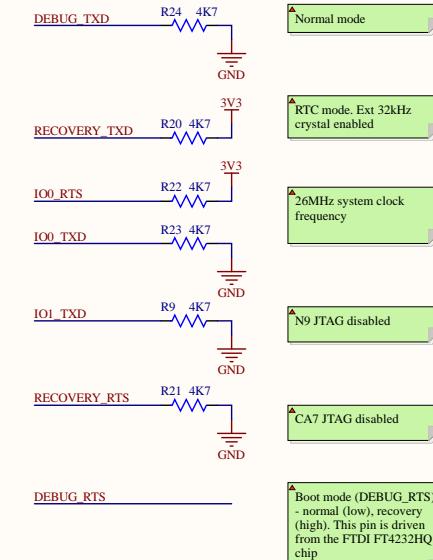
## Configurable I/O Blocks



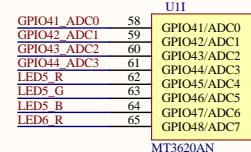
## GPIOs



## Strapping



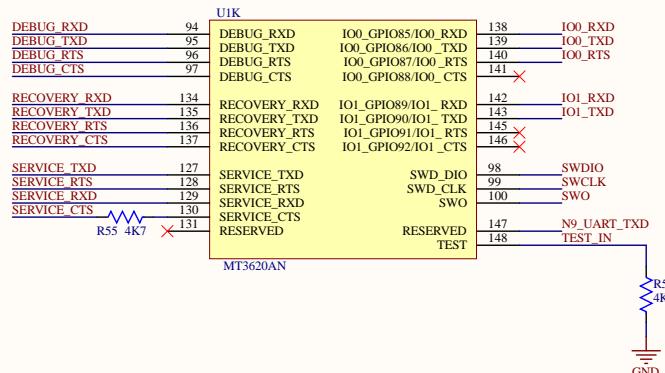
## ADCs and GPIOs



## I2S Audio

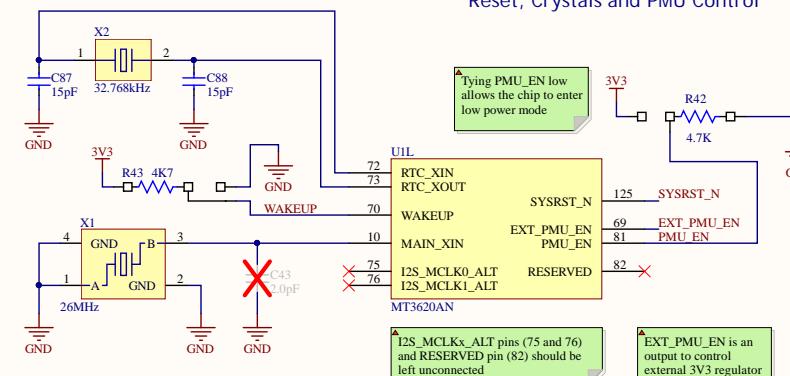


## Support Interface

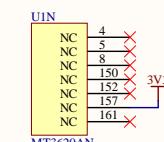


CL=12.5pF  
Using the equation given in  
<http://foxonline.com/pdfs/xtaldesignnotes.pdf>  
(and assuming stray capacitance of 5pF), CL1 and  
CL2 = 15pF

## Reset, Crystals and PMU Control



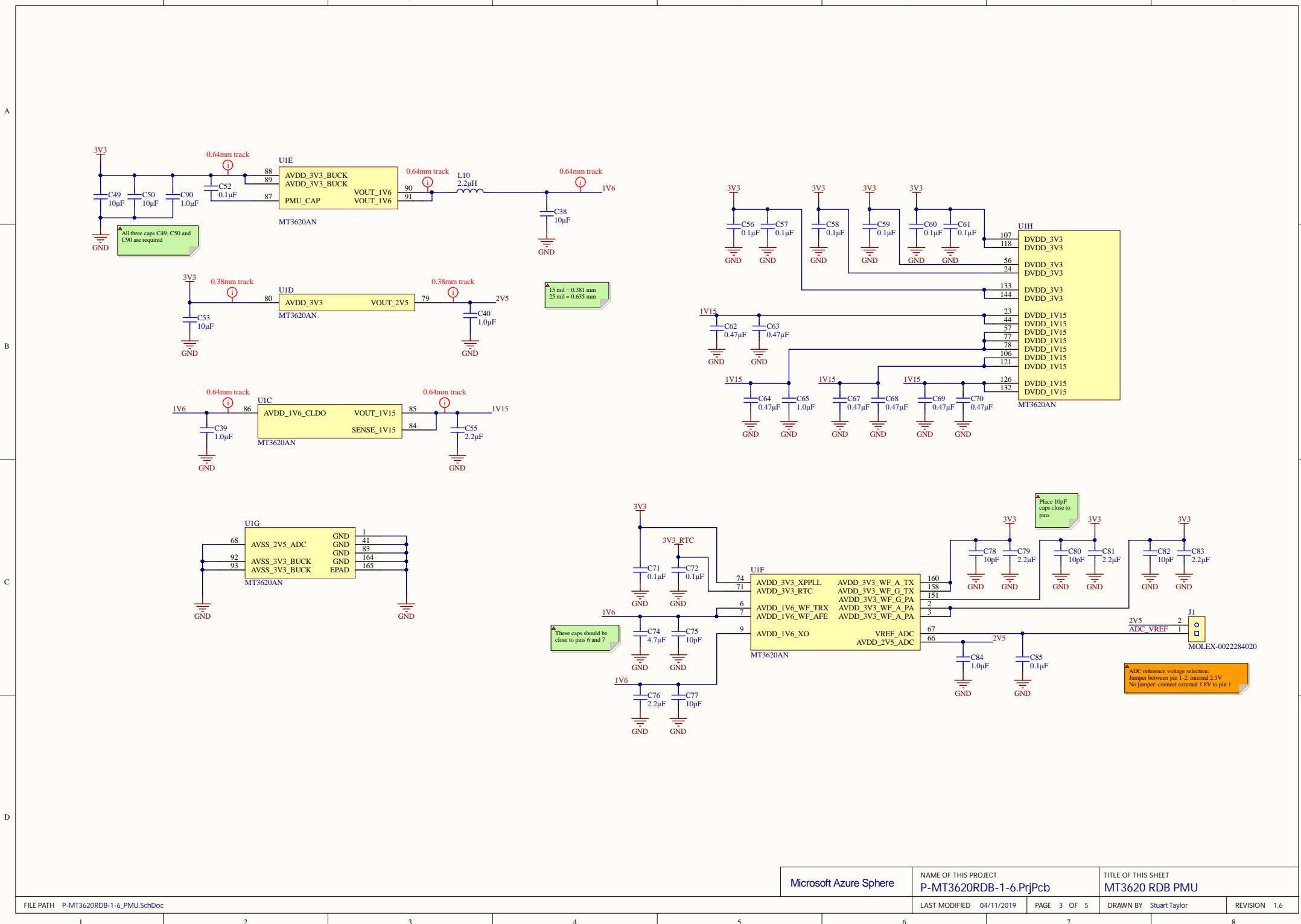
## NC Pins



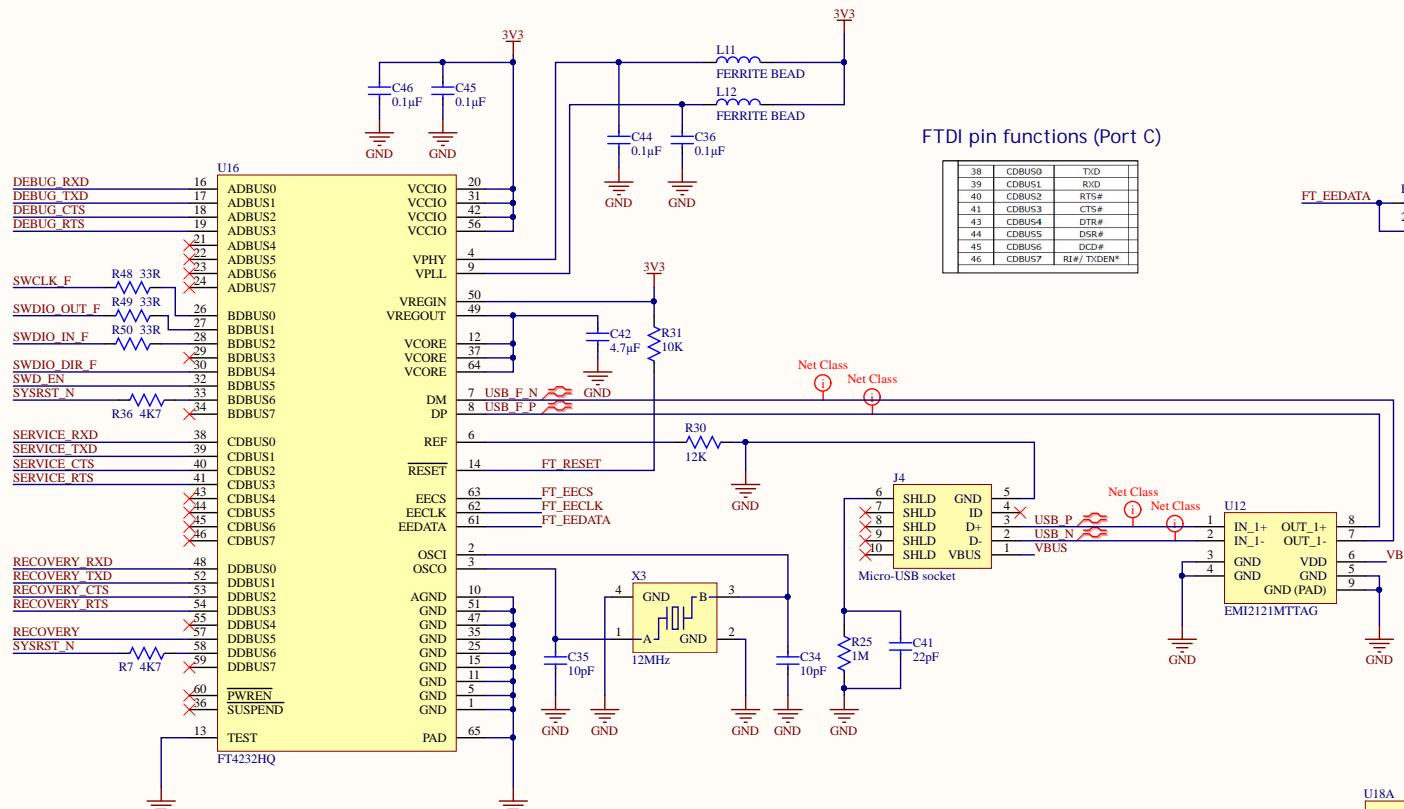
NC pins are unconnected inside the chip and can be used to simplify PCB routed as required. Pin 157 is used to simplify routing for WiFi power pin (158).

Microsoft Azure Sphere

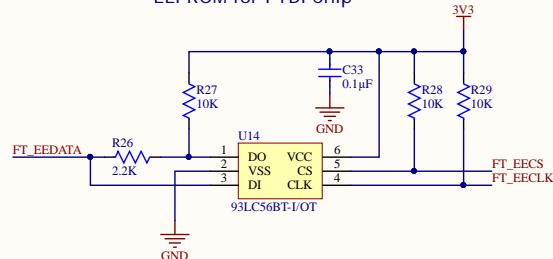
NAME OF THIS PROJECT  
P-MT3620RDB-1-6.PjrPcbTITLE OF THIS SHEET  
MT3620 RDB PIO



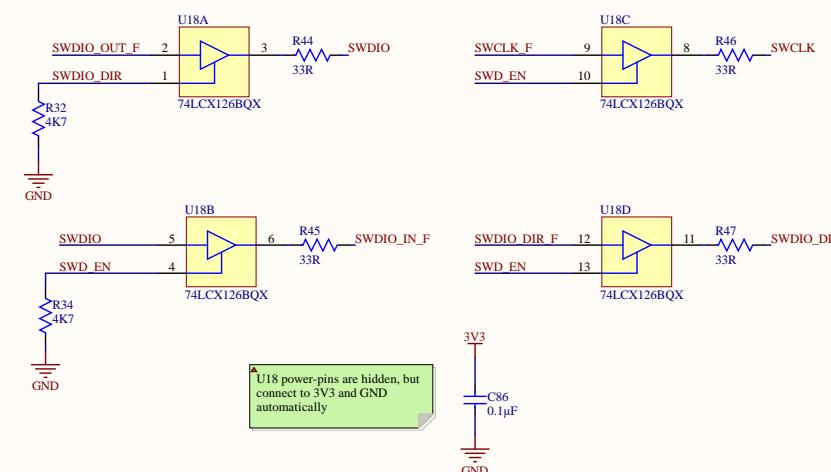
### FTDI USB Interface



### EEPROM for FTDI Chip



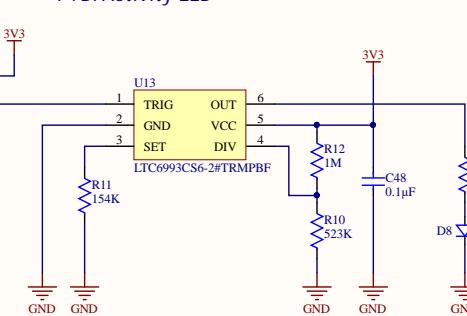
### SWD\_DIO Tri-state Buffer

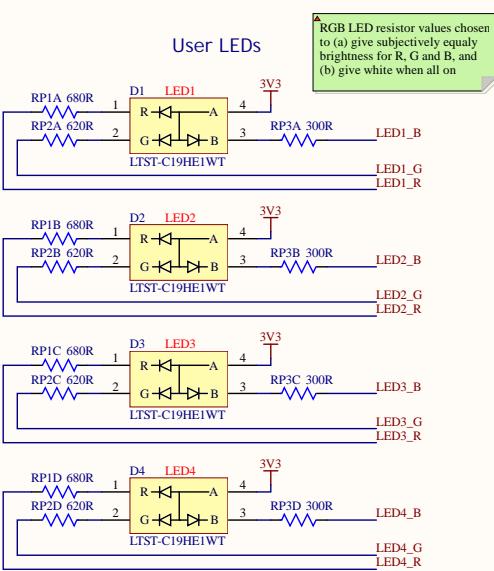
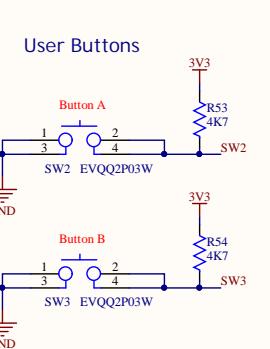
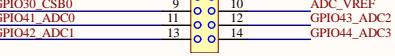
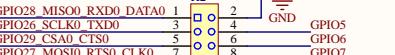
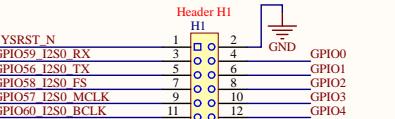


### FTDI Recovery

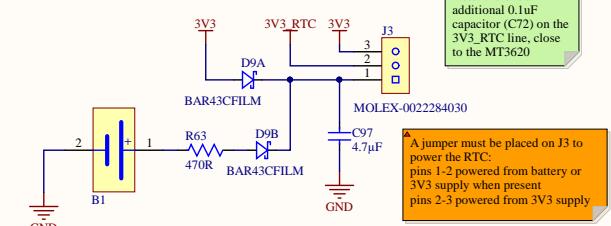
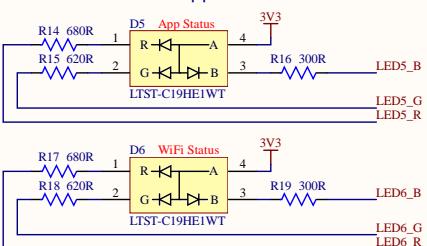
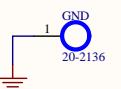
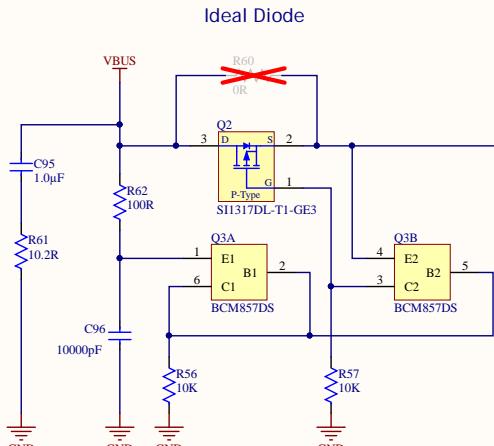
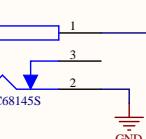


### FTDI Activity LED

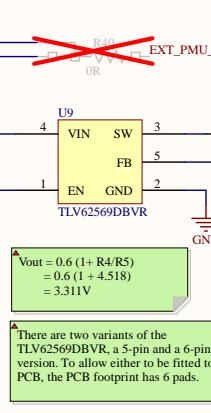
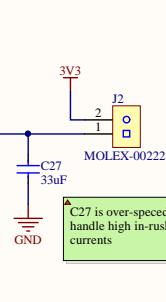


**User LEDs****User Buttons****Interface Headers****Test Points**

WAKEUP	1	IV15
EXT_PMU_EN	2	IV6
RECOVERY	3	2V5
N9_UART_TXD	4	3V3
SYSRST_N	5	VBUS
SWCLK	6	GND
SWDIO	7	FT_RESET
SWO	8	TEST_IN
ANTSEL1	9	ANTSEL0
ANTSEL0	10	DEBUG_RXD
RESET	11	DEBUG_TXD
DEBUG_RTS	12	DEBUG_RxD
DEBUG_CTS	13	DEBUG_TxD
RECOVERY_RxD	14	RECOVERY_CTS
RECOVERY_TxD	15	RECOVERY_RxD
DEBUG_CTS	16	SERVICE_RxD
DEBUG_RxD	17	SERVICE_CTS
RECOVERY_RxD	18	3V3_RTC
IO0_RXD	19	IO1_RXD
IO1_RXD	20	3V3

**3V3 RTC Battery Supply****WiFi and App Status LEDs****Ground Test Point****Negative-Voltage / Over-Voltage / Over-Current Protection****5V Power Socket**

SI13590DV-T1-E3 is a reverse voltage, over-voltage and over-current protection chip. R3 set to give trip current of 0.75A. If trip current exceeded, input power must be removed to reset the device. If the voltage at the IN pin exceeds 5.8V, GATE is pulled low, switching off the load. When input voltage returns below 5.7V, GATE is pulled high restoring power to load.

**3V3 Buck Converter****3V3 Isolator****3V3 Power Supply LED**