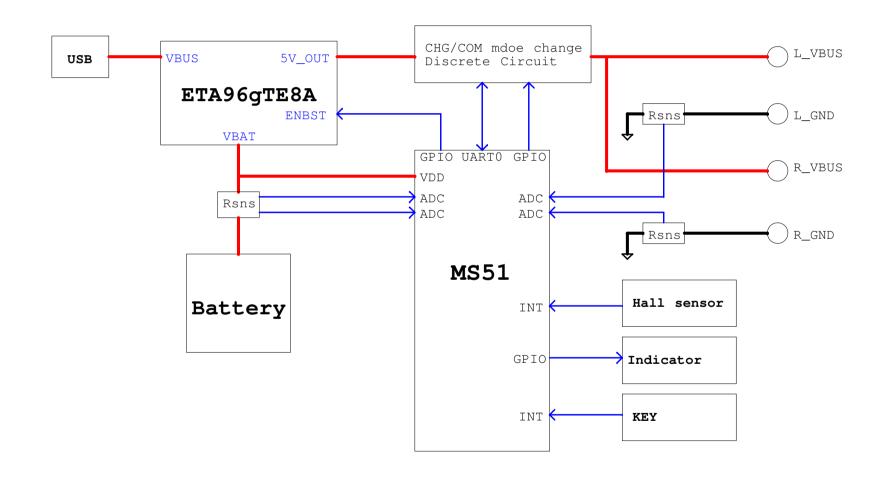
DATE	REVISION	INITIALS	DESCRIPTION
2018.05.18	0.1	Yiming	Initial Version
2020.08.05	0.2	Yuga	Modify PMos and Nmos symbol
2021.01.20	0.3	Yuga	Modify Nmos part number

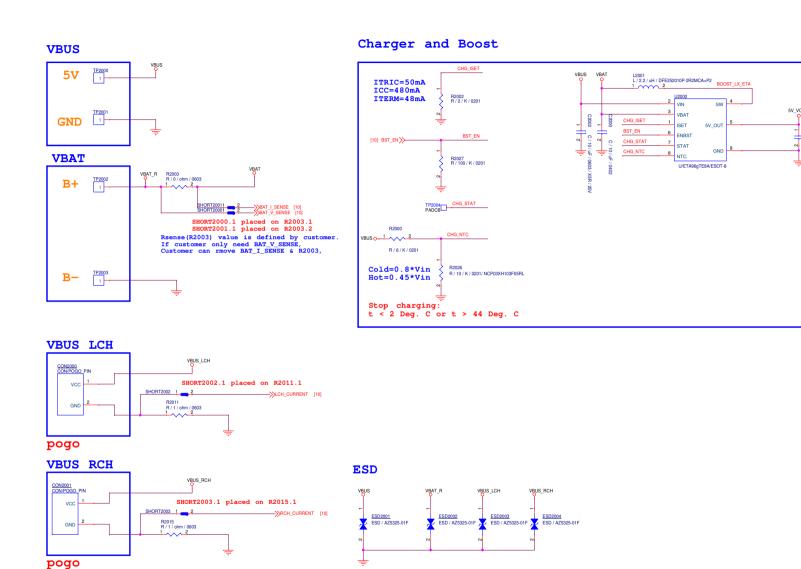


ChargeCase Schematic Function Block 1-wire UART



Title	02_BLOCK_DIAGRAM						
Size	Document Number					Re	
С	SCH_CHARGE CASE REFERENCE CIRCUIT						
Date:	Wednesday, January 20, 2021	Sheet	2	of	- 6	-	

MCU ICE MCU MS51XB9BE **KEY** IN-CIRCUIT-PROGRAMMING Flas 16kb/SRAM: 1kb U1000 U / MS51XB9BE / QFN20 ADC4: EAR RCH CHG CURRENT ICE_CLKTP1000 EAR_LCH_CHG_CURRENT R1002 R / 100 / K / 0201 1 R1031 R / 5.1 / ohm / 0402 BAT_Voltage BAT Current ICE_RST_TP1002____ C1000 C / 10 / uF / 0402 C / 100 / nF / 020 MCU_GPIO_P00 ICE_DATTP1006___ P0_0: KEY ICE_GNDTP1011 P0_1: LED#1 P1_0: LED#2 GND DΤι P1 2: LED#3 P1.6/ICE_DAT MCU_ICE_CLK P1 3: LED#4 15 P0.2/ICE_CLK P1 4: VBAT SENSE ON P1_5: EAR_CHG_COM_MODE_SEL P1_7: Boost Enable/Disable P3_0: EINT_HALL_SENSOR P2 0/nRESET MCU RST Battery sense MCU VDD 0 1 2 12-bit ADC, VREF=VDD R / 10 / K / 0201 Q / NTUD3170NZ / SOT-963 C1002 C / 1 / uF / 0201 LED indicator [20] BAT_V_SENSE >> 1 2 3 MCU ADC6 (By customer defined) R/10/K/0201 R / 0 / ohm / 0201 -R1006 R / 10 / K / 0201 Lch & Rch current sense B1010 R1012 D1002 LED/White/0201 LED/White/0201 LED/White/0201 LED/White/0201 C1004 C / 1 / uF / 0201 Q1006B Q / NTUD3170NZ / SOT-963 Q1007A Q / NTUD3170NZ / SOT-963 Q1007B Q / NTUD3170NZ / SOT-963 Q1006A Q / NTUD3170NZ / SOT-963 [20] BAT_I_SENSE >> 1 2 6 MCU ADC7 B / 10 / K / 0201 R / 0 / ohm / 0201 R1016 R / 10 / K / 0201 R1019 R / 1 / M / 0201 C1008 C / 1 / uF / 0201 R1017 R / 1 / M / 0201 R1018 R / 1 / M / 0201 R1030 R / 1 / M / 0201 O / NTUD3170NZ / SOT-963 MCU_ADC4 1201 BCH CURRENTS CHG/COM mdoe change discrete circuit TP1000 Hall sensor EINT PADCB R1022 -1 **V**+ R1025 R / 5.1 / K / 0402 R1023 R / 1 / M / 0201 Q/DMP21D0UFB4-7B/DFN1006-3 TP1001 MCU_GPIO_P30 INT - GND R1026 1 2 R / 0 / ohm / 0402 OVBUS LCH R1028 1 2 R/0/ohm/0402 R1020/R1021 ratio same as R1025/R1029 R1029 R / 5.1 / K / 0402 Boost enable R1020 1 2 B / 100 / K / 0201 H=CHG mode [20] BST_EN > MCU_GPIO_P17 L=COM mode Q1008A Q / NTUD3170NZ / SOT-963 Q1008B Q / NTUD3170NZ / SOT-963 R1035 R / 1 / M / 0201 MCU_RX0 1 2 R1027 R / 0 / ohm / 0402 Q1009A Q1009 Q / NTUD3Q70NIZUD3;0799623 / SOT-963 Airoha Technology Corp. Fax: +886-3-611-8833 Level shift 10 MCU(MS51XB9BE) Document Number SCH CHARGE CASE REFERENCE CIRCUIT



C2001 C / 4.7 / uF / 0402





Title	91 MECHANICAL(MICRO USB)	
Size C	Document Number SCH CHARGE CASE REFERENCE CIRCUIT	Rev 0.3
Date:	Wednesday, January 20, 2021 Sheet 6 of 6	