

053048-0610

6
5
4
3
2
1

J3
J2
X605SF

R18 0
R27 0

D3 BZT52C5V1S
D4 BZT52C5V1S

KEY_OP

V_BATT

GAS_EN

B_DET

D5 BZT52C5V1S

U2
MCP73831T_2ACIOT

C4 470pF
C5 4.7uF

R6 2K

R7 10K
R8 30K

Connect to negative terminal of battery

Q5 PMBT2222

Q3 PMBT2222

TA [1]

+8.0V
PULSE_OUT1
PULSE_OUT2

POWER SKRMABE010

V_BATT [1] 2/4 1/3 [1] KEY_PWR

ASMT-YTD2-0BB02
LED1

LED2
LED-2012

R19
470

LED5
LED-1608

R22
180

LED4
LED-1608

R23
180

LED3
LED-1608

R21
180

+3.3V

OP_LED

LED_HIGH

LED_MED

LED LOW

PCB HOLE 4ea

P1 HOLE2.0 P3 HOLE2.0
P2 HOLE2.0 P4 HOLE2.0

MCU Schematic

U1
STM32F070RBT6

Power Supply: +3.3V, C18 10uF C-1608, C19 0.1uF, C20 0.1uF, C21 0.1uF, C22 0.1uF, C23 0.1uF, C24 0.1uF, R40 NC, R41 NC.

MCU Pins: 1 VDD, 2 PC13, 3 PC14-OSC32_IN, 4 PC15-OSC32_OUT, 5 PF0-OSC_IN, 6 PF1-OSC_OUT, 7 NRST, 8 NRST, 9 PC0, 10 PC1, 11 PC2, 12 PC3, 13 VSSA, 14 VDDA, 15 PA0, 16 PA1, 17 PA2, 18 PA3, 19 VSS, 20 VDD, 21 PA4, 22 PA5, 23 PA6, 24 PA7, 25 PC4, 26 PC5, 27 PB0, 28 PB1, 29 PB2, 30 PB10, 31 PB11, 32 VSS, 33 PB12, 34 PB13, 35 PB14, 36 PB15, 37 PC6, 38 PC7, 39 PC8, 40 PC9, 41 PA8, 42 PA9, 43 PA11, 44 PA12, 45 PA13, 46 VDD, 47 VSS, 48 VDD, 49 PA15, 50 PC10, 51 PC11, 52 PC12, 53 PD2, 54 PB3, 55 PB4, 56 PB5, 57 PB6, 58 PB7, 59 BOOT0, 60 PB8, 61 PB9, 62 VSS, 63 VDD, 64 VDD.

Connectors and Components: NRST, GND JACK, STA_LED_B, STA_LED_G, STA_LED_R, HW_ID0, HW_ID1, BAT_ADC, BATT_THERM, KEY_PWR, PW_CTRL, CHG_STA, KEY_OP, OP_LED, KEY_UP, KEY_DOWN, USB_ID, SYS_SWCLK, SYS_SWDI0, EN_+8V, PULSE_OUT2, USART1_RX, USART1_TX, PULSE_OUT1, USB_DET, LED_LOW, LED_MED, LED_HIGH, GAS_EN, CHG_CTRL.

Component Values Table:

	R41	R40
Portable	NC	NC
External	NC	10K

	R41	R40
Portable	NC	NC
External	NC	10K

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