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| Title | | | |
| Size A3 | Number | | Revision |
| Date: | 2019-03-29 | | Sheet of |
| File: | E:\WORK\101_sch_block.SchDoc | | Drawn By: |

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|----------|--------|--------|-------|-----------------|-------------------------|
| 功能 | 电压 | 电流 | 功率 | 实际电流 | 设计电流 |
| 液晶 | 3.3V | 45ma | 150mW | 12V总电流 740ma | 3A |
| MCU | 2-3.6V | 76ma | | 5V总电流 3.1A | 2A+2A |
| 蓝牙模块 | 2-3.6V | 20ma | | 4V总电流 2A | BAT，MOS管开关控制 |
| 蓝牙音箱 | 5V | 600ma | | 2-3.3V总电流 600ma | MCU 3.0V LDO 其他 3.3V |
| 红外检测X2 | 3.3-5V | 40ma | | | |
| 暖光LEDX10 | 3.3V | 40ma | | | |
| 凸轮电机 | 12V | 240ma | | | |
| USB放电 | 5V | 2A | | | |
| 电磁铁 | 12V | 500ma | | | |
| GPRS模块 | 4V | 2000ma | | | |
| 本地充电 | 5V | 500ma | | | |

Title

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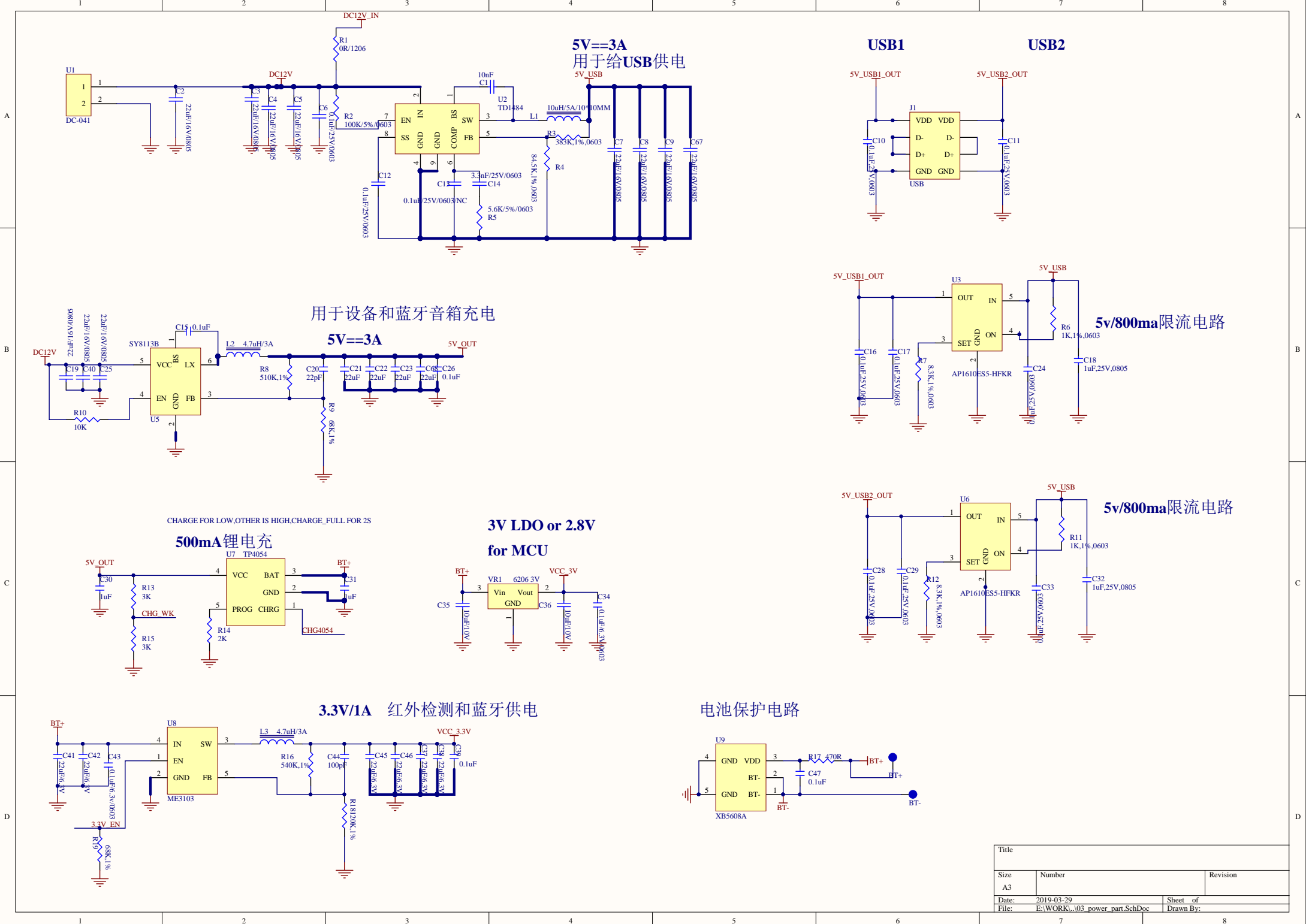
Date: 2019-03-29

Sheet of

File: E:\WORK_.02_power_block.SchDoc

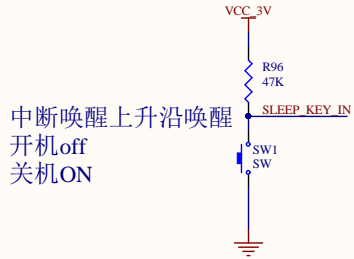
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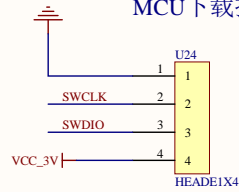


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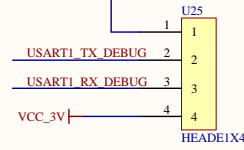
出厂拨动开关按钮



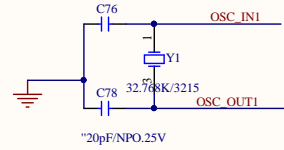
MCU下载接口



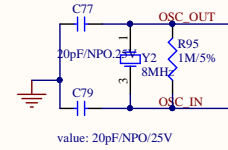
MCU下载接口



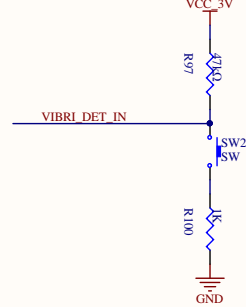
32.768k电路



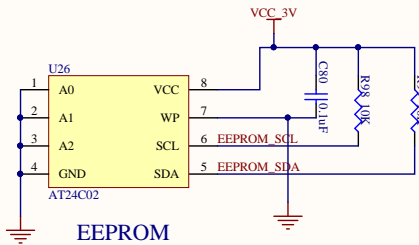
8M时钟电路



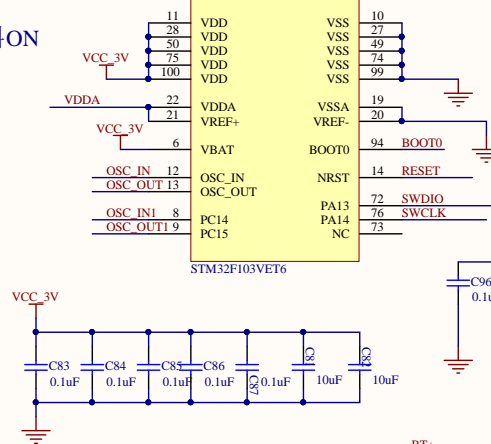
倾覆开关，竖立OFF，倾斜ON



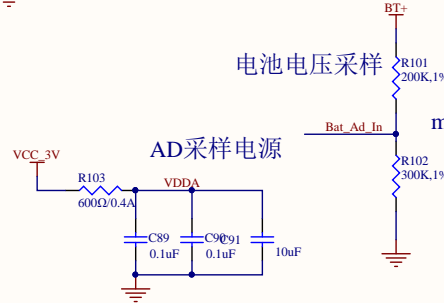
EEPROM



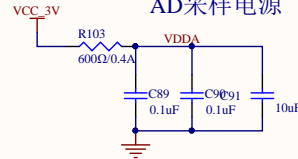
MCU1B



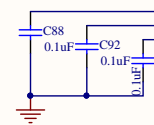
电池电压采样



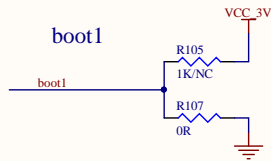
AD采样电源



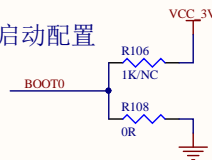
measure bt vol



boot1



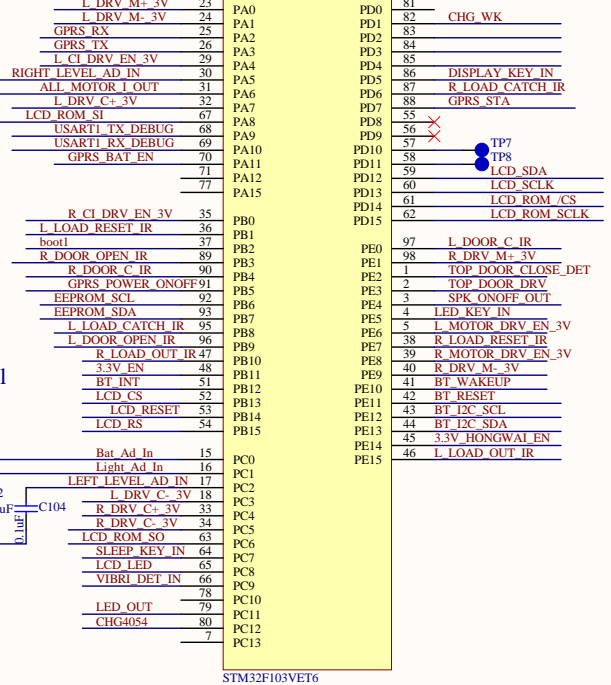
启动配置



RC复位



MCU1A



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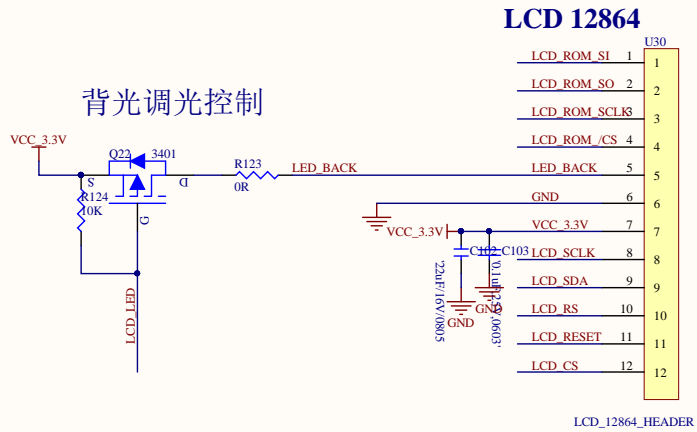
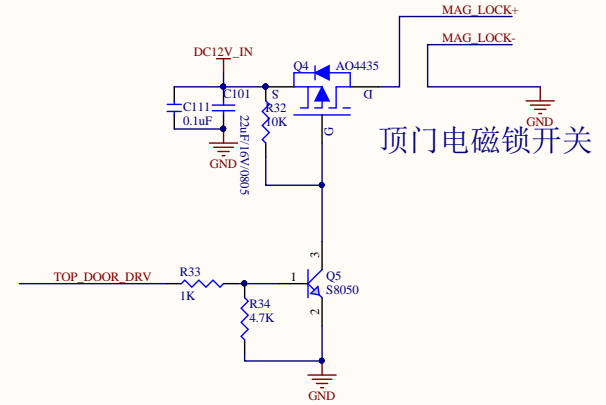
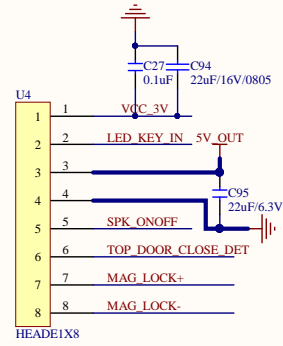
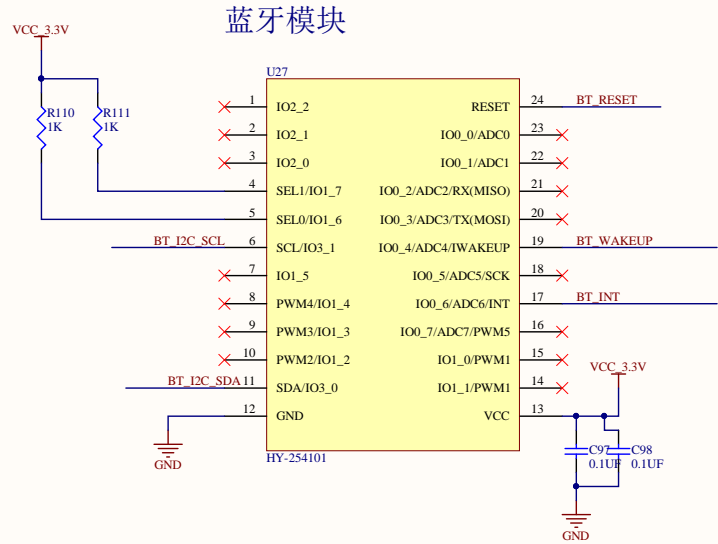
D

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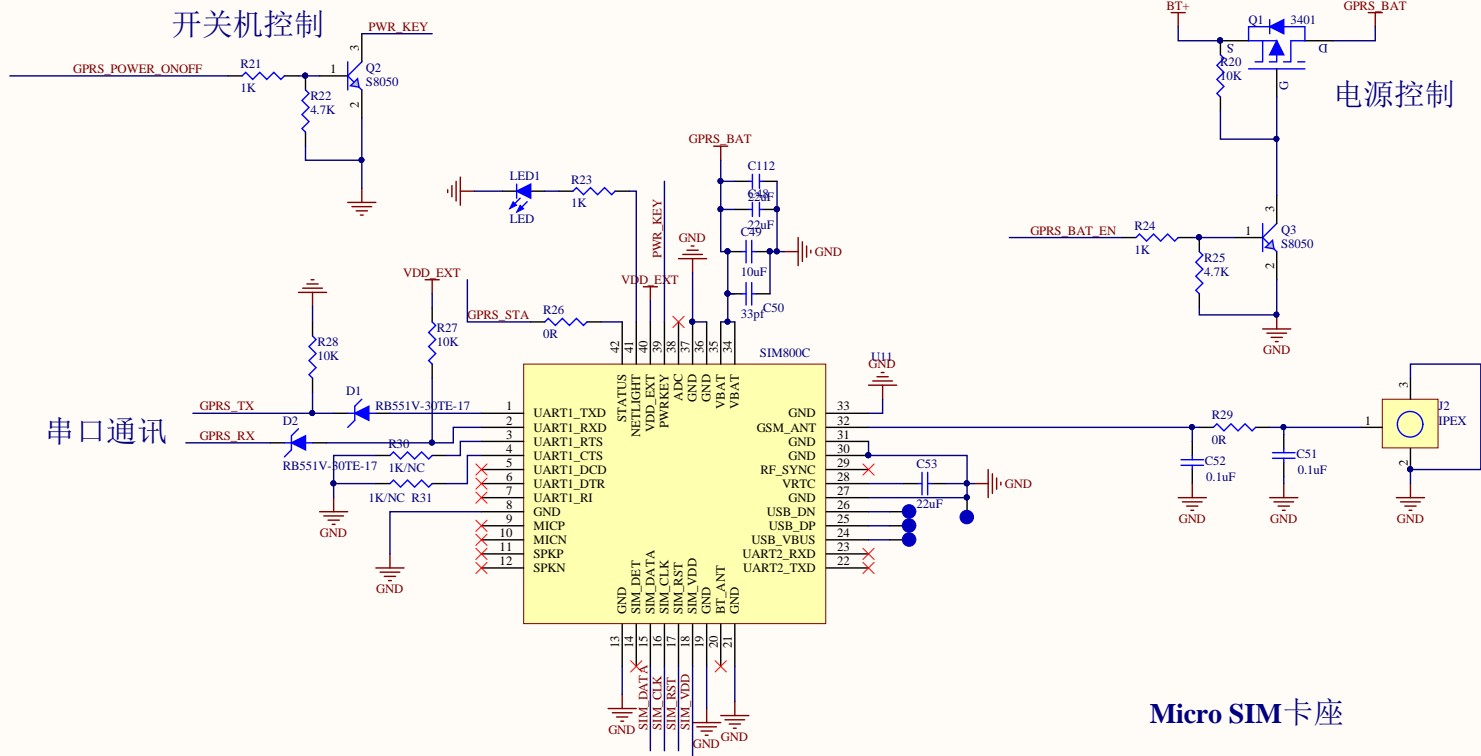
B

C

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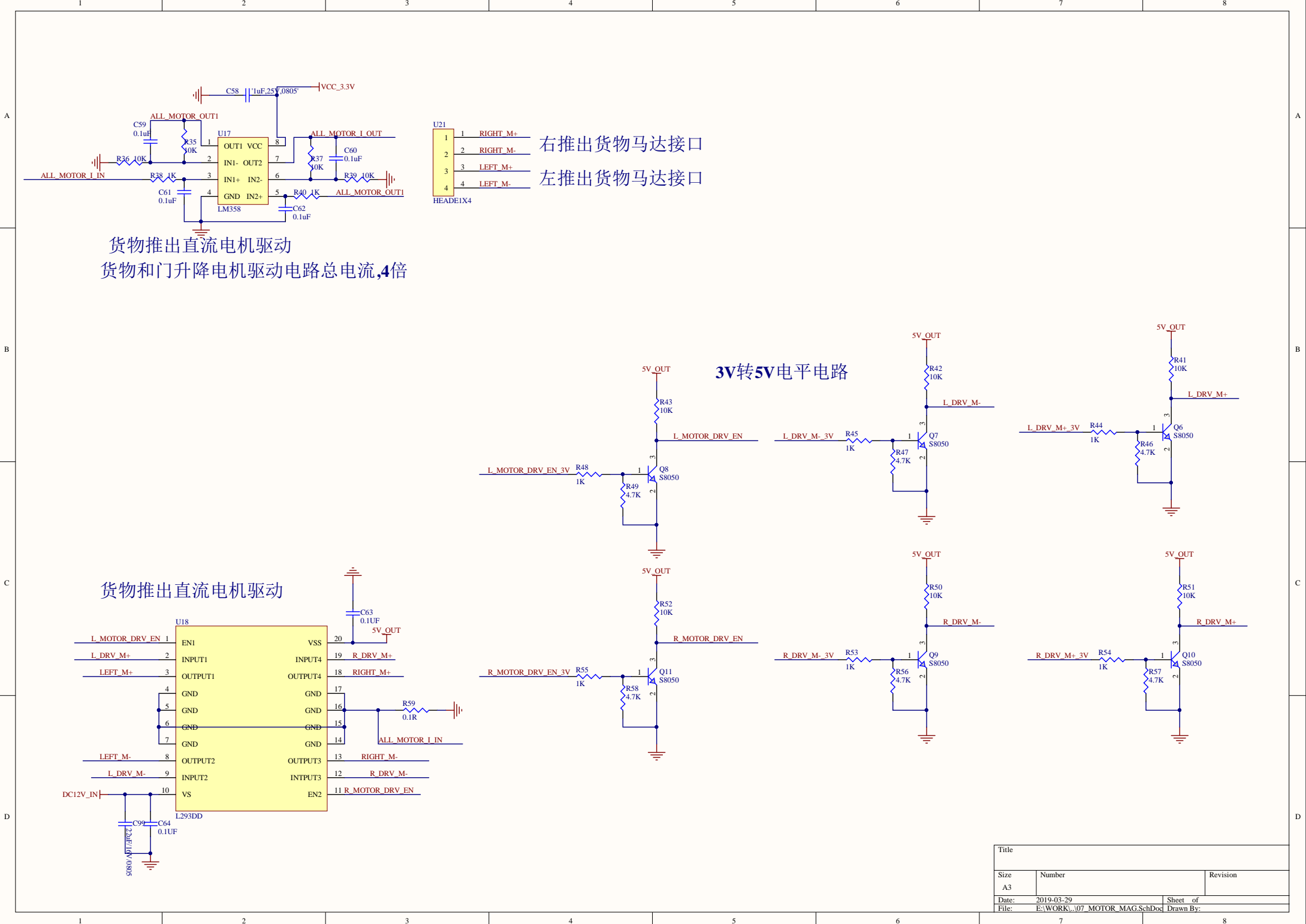


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ESD保护

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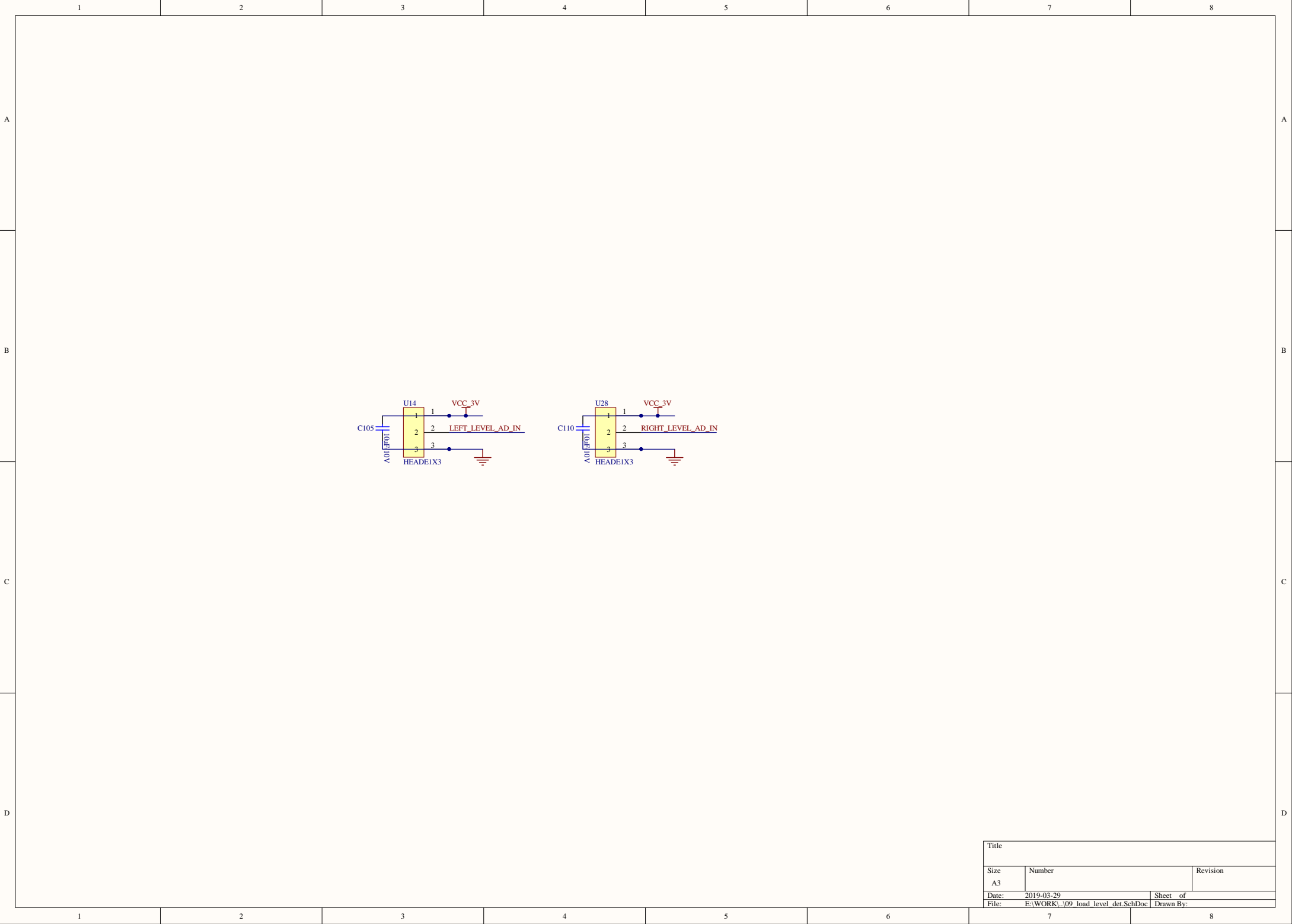
货物推出直流电机驱动
货物和门升降电机驱动电路总电流,4倍

右推出货物马达接口
左推出货物马达接口

3V转5V电平电路

货物推出直流电机驱动

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| B | 端口定义 | | | 睡眠拨动开关检测 SLEEP_KEY_IN:PC7 1:开机, 0:关机 关机睡眠, 上升沿中断唤醒 | | | | |
| | GPRS部分 GPRS_STA:PD7 GPRS_TX:PA3 GPRS_RX:PA2 GPRS_BAT_EN:PA11 GPRS_POWER_ONOFF:PB5 | | | 红外供电开关 3.3V_HONGWAI_EN:PE141:供电, 0:断电 二维码显示开关检测 DISPLAY_KEY_IN:PD5 0: 有按键 | | | | |
| | 充电部分 CHG4054:PC12 低: 正充 高: 充饱 | | | 充电检测 CHG_WK:PD1 1:有充电 0:无充电 倾覆开关 VIBRI_DET_IN:PC9 1:竖立 0:倾倒 3.3V电源控制 3.3V_EN:PB11 H:使能 L:禁止 蓝牙音箱电源开关 SPK_ONOFF_OUT:PE4 高3S开机 | | | | |
| | LCD部分 LCD_ROM_SO:PC6 LCD_ROM_SCLK:PD15 LCD_ROM_CS:PD14LCD_ROM_SI: PA8 LCD_SCLK:PD13 LCD_SDA:PD12 LCD_CS:PB13 LCD_RS:PB15 LCD_RESET:PB14 LCD_LED:PC8 EEPROM部分 EEPROM_SCL: PB6 EEPROM_SDA:PB7 | | | 光敏电阻检测 Light_Ad_In:PC1 led灯开关检测 LED_KEY_IN:PE5 0: 有按键 led灯输出控制 LED_OUT:PC11 1:开灯 0:关灯 | | | | |
| C | 蓝牙模块 BT_I2C_SCL:PE12 BT_I2C_SDA: PE13 BT_WAKEUP:PE10 BT_RESET:PE11 BT_INT:PB12 | | | 左仓位检测 LEFT_LEVEL_AD_IN:PC2 右仓位检测 RIGHT_LEVEL_AD_IN:PA5 顶门开关检测 TOP_DOOR_CLOSE_DET:PE2 | | | | |
| | 预留 | 电池电压 Bat_Ad_In: PC0 Vdet=(3/5)*Vbat | | 货物推出电机驱动 左凸轮马达 右凸轮马达 L_DRV_M-_3V:PA1 R_DRV_M-_3V:PE9 L_MOTOR_DRV_EN_3V:PE6 R_MOTOR_DRV_EN_3V:PE8 L_DRV_M+_3V:PA0 R_DRV_M+_3V:PE1 | | | | |
| | | | | 电机总电流采样, 做堵转保护使用 ALL_MOTOR_I_OUT:PA6 | | | | |
| | | | | 门升降马达驱动 左门驱动 右门驱动 L_DRV_C+_3V:PA7 R_DRV_C+_3V:PC4 L_DRV_C-_3V:PC3 R_DRV_C-_3V:PC5 L_CI_DRV_EN_3V:PA4 R_CI_DRV_EN_3V:PB0 | | | | |
| D | 左红外传感器 右红外传感器 L_LOAD_OUT_IR:PE15 R_LOAD_OUT_IR:PB10 H:代表无遮挡 L_LOAD_RESET_IR:PB1 R_LOAD_RESET_IR:PE7 L:代表有遮挡 L_DOOR_C_IR:PE0 R_DOOR_C_IR:PB4 L_DOOR_OPEN_IR:PB9 R_DOOR_OPEN_IR:PB3 L_LOAD_CATCH_IR:PB8 R_LOAD_CATCH_IR:PD6 | | | 顶门电磁锁驱动 TOP_DOOR_DRV:PE3 | | | | |
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