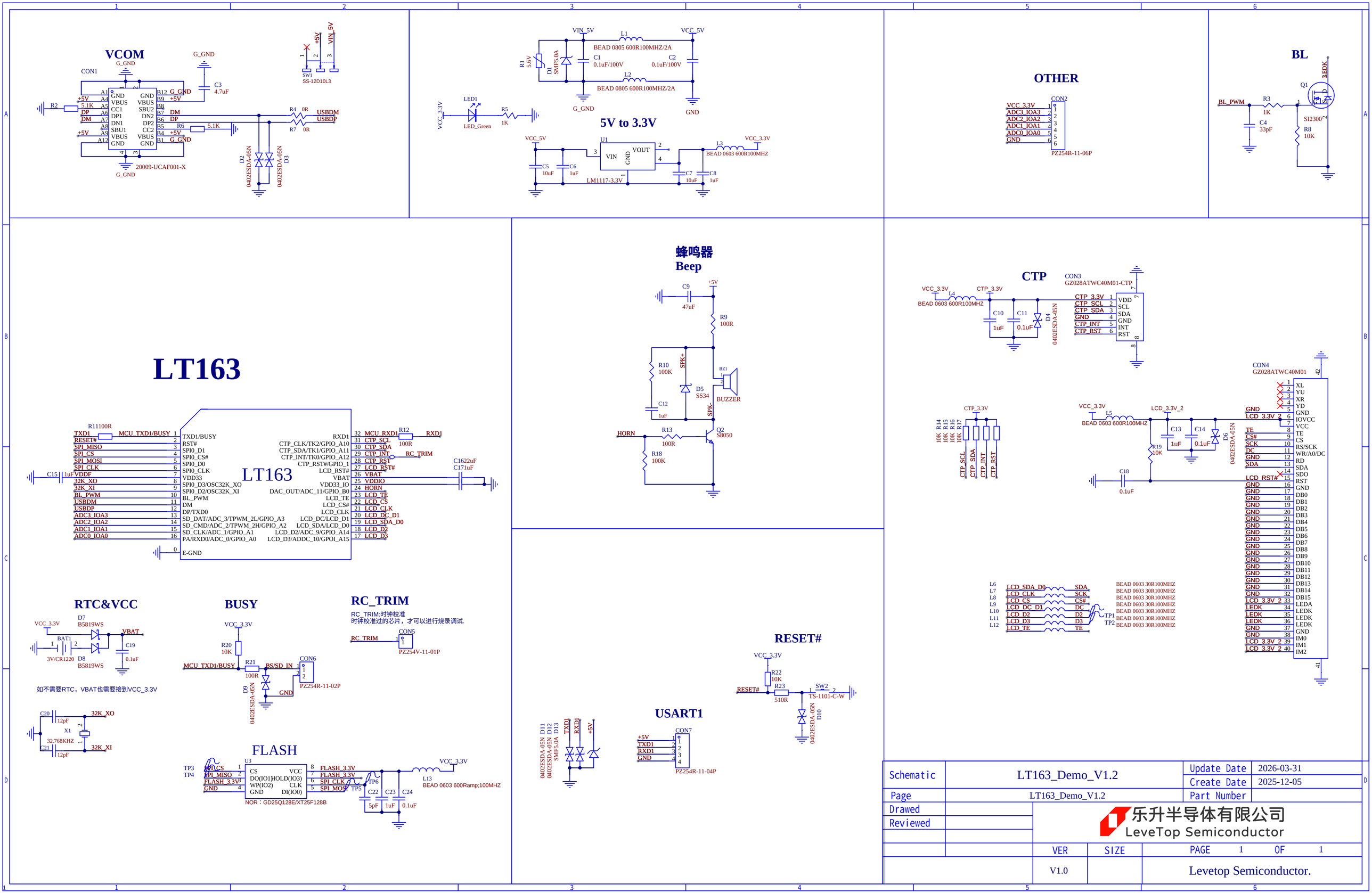
VCOM
CON1
20009-UCAF001-X
G_GND
C3 4.7uF
R2 5.1K
R6 5.1K
R4 0R
R7 0R
USBDM
USBDP
D2 0402ESDA-05N
D3 0402ESDA-05N
SW1 SS-12D10L3
5V to 3.3V
VIN_5V
VCC_5V
L1 BEAD 0805 600R100MHZ/2A
L2 BEAD 0805 600R100MHZ/2A
R1 5.6V
D1 SMF5.0A
C1 0.1uF/100V
C2 0.1uF/100V
LED1 LED_Green
R5 1K
U1 LM1117-3.3V
VIN
VOUT
GND
C5 10uF
C6 1uF
C7 10uF
C8 1uF
L3 BEAD 0603 600R100MHZ
VCC_3.3V
OTHER
CON2
PZ254R-11-06P
BL
BL_PWM
R3 1K
C4 33pF
R8 10K
Q1 SI2300
BEDK
LT163
R11100R
MCU_TXD1/BUSY
RXD1
R12 100R
RC_TRIM
C1622uF
C171uF
C15 1uF
TXD1
RESET#
SPI_MISO
SPI_CS
SPI_MOSI
SPI_CLK
VDDF
32K_XO
32K_XI
BL_PWM
USBDM
USBDP
ADC3_IOA3
ADC2_IOA2
ADC1_IOA1
ADC0_IOA0
TXD1/BUSY
RST#
SPI0_D1
SPI0_CS#
SPI0_D0
SPI0_CLK
VDD33
SPI0_D3/OSC32K_XO
SPI0_D2/OSC32K_XI
BL_PWM
DM
DP/TXD0
SD_DAT/ADC_3/TPWM_2L/GPIO_A3
SD_CMD/ADC_2/TPWM_2H/GPIO_A2
SD_CLK/ADC_1/GPIO_A1
PA/RXD0/ADC_0/GPIO_A0
E-GND
RXD1
CTP_CLK/TK2/GPIO_A10
CTP_SDA/TK1/GPIO_A11
CTP_INT/TK0/GPIO_A12
CTP_RST#/GPIO_1
LCD_RST#
VBAT
VDD33_IO
DAC_OUT/ADC_11/GPIO_B0
LCD_TE
LCD_CS#
LCD_CLK
LCD_DC/LCD_D1
LCD_SDA/LCD_D0
LCD_D2/ADC_9/GPIO_A14
LCD_D3/ADDC_10/GPIO_A15
MCU_RXD1
CTP_SCL
CTP_SDA
CTP_INT
CTP_RST
LCD_RST#
VBAT
VDDIO
HORN
LCD_TE
LCD_CS
LCD_CLK
LCD_DC_D1
LCD_SDA_D0
LCD_D2
LCD_D3
蜂鸣器
Beep
C9 47uF
R9 100R
R10 100K
C12 1uF
D5 SS34
BZ1 BUZZER
SPK+
SPK-
HORN
R13 100R
R18 100K
Q2 S8050
CTP
CON3 GZ028ATWC40M01-CTP
VCC_3.3V
CTP_3.3V
L4 BEAD 0603 600R100MHZ
C10 1uF
C11 0.1uF
D4 0402ESDA-05N
CTP_3.3V
CTP_SCL
CTP_SDA
GND
CTP_INT
CTP_RST
VDD
SCL
SDA
GND
INT
RST
CON4 GZ028ATWC40M01
R14 10K
R15 10K
R16 10K
R17 10K
L5 BEAD 0603 600R100MHZ
LCD_3.3V_2
C13 1uF
C14 0.1uF
D6 0402ESDA-05N
R19 10K
C18 0.1uF
LCD_3.3V_2
LCD_RST#
XL
YU
XR
YD
GND
IOVCC
VCC
TE
CS
RS/SCK
WR/A0/DC
RD
SDA
SDO
RST
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
DB8
DB9
DB10
DB11
DB12
DB13
DB14
DB15
LEDA
LEDK
IM0
IM1
IM2
L6 LCD_SDA_D0 SDA BEAD 0603 30R100MHZ
L7 LCD_CLK SCK BEAD 0603 30R100MHZ
L8 LCD_CS CS# BEAD 0603 30R100MHZ
L9 LCD_DC_D1 DC BEAD 0603 30R100MHZ
L10 LCD_D2 D2 BEAD 0603 30R100MHZ
L11 LCD_D3 D3 BEAD 0603 30R100MHZ
L12 LCD_TE TE BEAD 0603 30R100MHZ
TP1
TP2
RTC&VCC
D7 B5819WS
D8 B5819WS
BAT1 3V/CR1220
VCC_3.3V
VBAT
C19 0.1uF
如不需要RTC，VBAT也需要接到VCC_3.3V
C20 12pF
C21 12pF
X1 32.768KHZ
32K_XO
32K_XI
BUSY
VCC_3.3V
R20 10K
R21 100R
MCU_TXD1/BUSY
BS/SD_IN
CON6 PZ254R-11-02P
D9 0402ESDA-05N
GND
RC_TRIM
RC_TRIM:时钟校准
时钟校准过的芯片，才可以进行烧录调试.
CON5 PZ254V-11-01P
FLASH
U3
TP3 SPI_CS
TP4 SPI_MISO
FLASH_3.3V
GND
CS
DO(IO1)
WP(IO2)
GND
VCC
HOLD(IO3)
CLK
DI(IO0)
NOR：GD25Q128E/XT25F128B
FLASH_3.3V
SPI_CLK
SPI_MOSI
TP5
TP6
C22 5pF
C23 1uF
C24 0.1uF
L13 BEAD 0603 600Ramp;100MHZ
RESET#
VCC_3.3V
R22 10K
R23 510R
SW2 TS-1101-C-W
D10 0402ESDA-05N
USART1
CON7 PZ254R-11-04P
+5V
TXD1
RXD1
GND
0402ESDA-05N D11
0402ESDA-05N D12
SMF5.0A D13
Schematic
LT163_Demo_V1.2
Update Date 2026-03-31
Create Date 2025-12-05
Page
LT163_Demo_V1.2
Part Number
Drawed
Reviewed
乐升半导体有限公司
LeveTop Semiconductor
VER
SIZE
PAGE 1 OF 1
V1.0
Levetop Semiconductor.