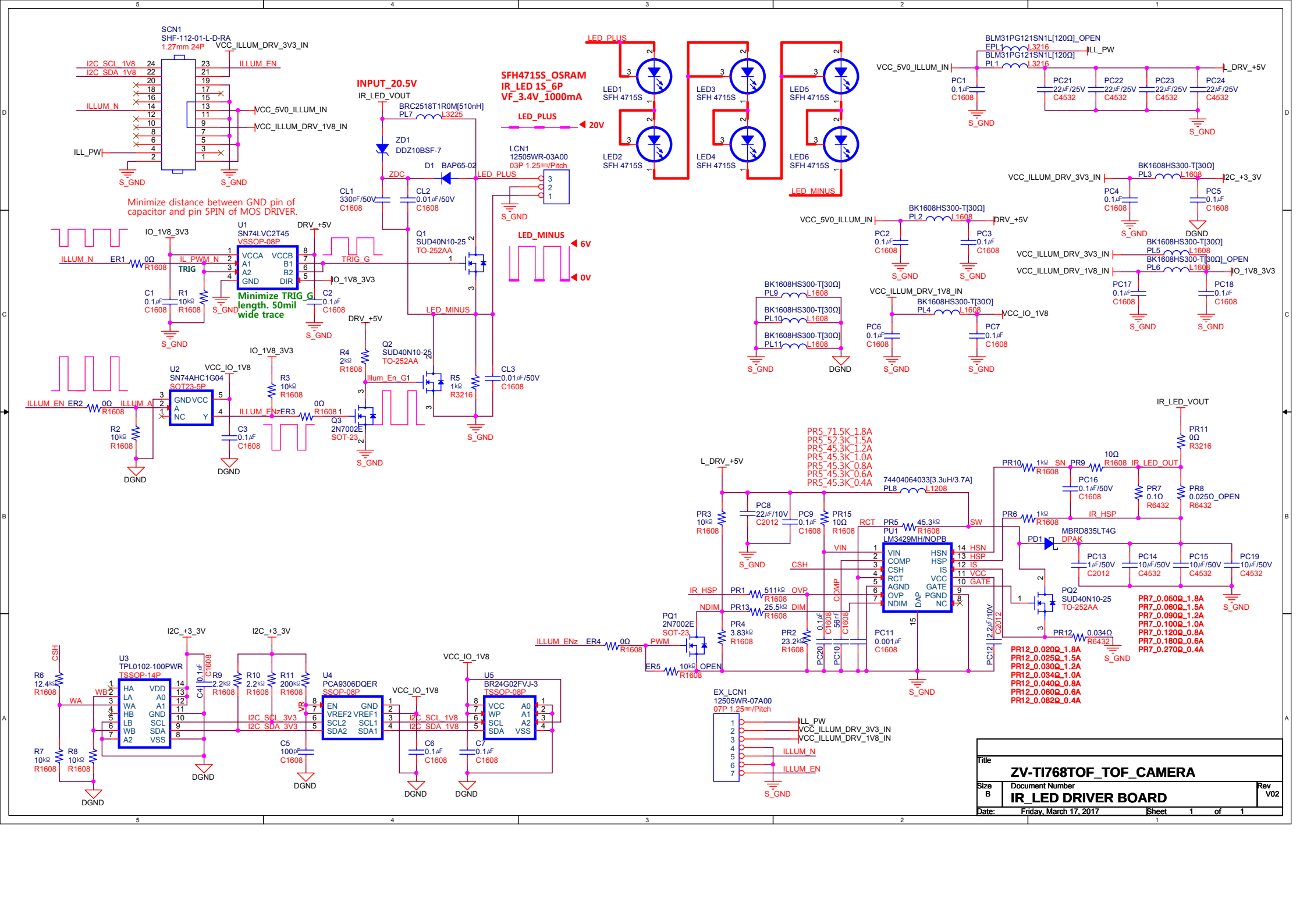
SCN1
SHF-112-01-L-D-RA
1.27mm 24P
VCC_ILLUM_DRV_3V3_IN
I2C_SCL_1V8
I2C_SDA_1V8
ILLUM_EN
ILLUM_N
VCC_5V0_ILLUM_IN
VCC_ILLUM_DRV_1V8_IN
ILL_PW
S_GND
INPUT_20.5V
IR_LED_VOUT
BRC2518T1R0M[510nH]
PL7 L3225
ZD1
DDZ10BSF-7
D1 BAP65-02
ZDC
LED_PLUS
CL1 330pF/50V C1608
CL2 0.01μF/50V C1608
LCN1
12505WR-03A00
03P 1.25mm/Pitch
SFH4715S_OSRAM
IR_LED 1S_6P
VF_3.4V_1000mA
LED_PLUS 20V
LED1 SFH 4715S
LED2 SFH 4715S
LED3 SFH 4715S
LED4 SFH 4715S
LED5 SFH 4715S
LED6 SFH 4715S
LED_MINUS
BLM31PG121SN1L[120Ω]_OPEN
EPL1 L3216
BLM31PG121SN1L[120Ω]
PL1 L3216
ILL_PW
L_DRV_+5V
PC1 0.1μF C1608
PC21 22μF/25V C4532
PC22 22μF/25V C4532
PC23 22μF/25V C4532
PC24 22μF/25V C4532
Minimize distance between GND pin of capacitor and pin 5PIN of MOS DRIVER.
U1
SN74LVC2T45
VSSOP-08P
IO_1V8_3V3
DRV_+5V
ILLUM_N
ER1 0Ω R1608
IL_PWM_N
TRIG
TRIG_G
C1 0.1μF C1608
R1 10kΩ R1608
C2 0.1μF C1608
Minimize TRIG_G length. 50mil wide trace
Q1
SUD40N10-25
TO-252AA
LED_MINUS 6V 0V
VCC_ILLUM_DRV_3V3_IN
BK1608HS300-T[30Ω]
PL3 L1608
I2C_+3_3V
PC4 0.1μF C1608
PC5 0.1μF C1608
DGND
VCC_5V0_ILLUM_IN
PL2 L1608
DRV_+5V
PC2 0.1μF C1608
PC3 0.1μF C1608
PL5 L1608
PL6 L1608
IO_1V8_3V3
PC17 0.1μF C1608
PC18 0.1μF C1608
VCC_ILLUM_DRV_1V8_IN
PL9 L1608
PL10 L1608
PL11 L1608
PL4 L1608
VCC_IO_1V8
PC6 0.1μF C1608
PC7 0.1μF C1608
U2
SN74AHC1G04
SOT23-5P
VCC_IO_1V8
ILLUM_EN ER2 0Ω R1608 ILLUM_A
ILLUM_EnZ ER3 0Ω R1608
R2 10kΩ R1608
R3 10kΩ R1608
C3 0.1μF C1608
R4 2kΩ R1608
Q2
SUD40N10-25
TO-252AA
Illum_En_G1
R5 1kΩ R3216
CL3 0.01μF/50V C1608
Q3
2N7002E
SOT-23
IR_LED_VOUT
PR11 0Ω R3216
PR5_71.5K_1.8A
PR5_52.3K_1.5A
PR5_45.3K_1.2A
PR5_45.3K_1.0A
PR5_45.3K_0.8A
PR5_45.3K_0.6A
PR5_45.3K_0.4A
L_DRV_+5V
74404064033[3.3uH/3.7A]
PL8 L1208
PR10 1kΩ SN R1608
PR9 10Ω R1608 IR_LED_OUT
PC16 0.1μF/50V C1608
PR7 0.1Ω R6432
PR8 0.025Ω_OPEN R6432
IR_HSP
PR3 10kΩ R1608
PC8 22μF/10V C2012
PC9 0.1μF C1608
PR15 10Ω R1608
RCT
PR5 45.3kΩ R1608
SW
PR6 1kΩ R1608
PU1
LM3429MH/NOPB
MBRD835LT4
DPAK
PD1
VIN
CSH
PC13 1μF/50V C2012
PC14 10μF/50V C4532
PC15 10μF/50V C4532
PC19 10μF/50V C4532
IR_HSP
PR1 511kΩ OVP R1608
NDIM
PR13 25.5kΩ DIM R1608
CDMP
PQ2
SUD40N10-25
TO-252AA
PR7_0.050Ω_1.8A
PR7_0.060Ω_1.5A
PR7_0.090Ω_1.2A
PR7_0.100Ω_1.0A
PR7_0.120Ω_0.8A
PR7_0.180Ω_0.6A
PR7_0.270Ω_0.4A
PQ1
2N7002E
SOT-23
PWM
PR4 3.83kΩ R1608
PR2 23.2kΩ R1608
PC11 0.001μF C1608
ILLUM_ENz ER4 0Ω R1608
ER5 10kΩ OPEN R1608
PR12 0.034Ω R6432
PR12_0.020Ω_1.8A
PR12_0.025Ω_1.5A
PR12_0.030Ω_1.2A
PR12_0.034Ω_1.0A
PR12_0.040Ω_0.8A
PR12_0.060Ω_0.6A
PR12_0.082Ω_0.4A
U3
TPL0102-100PWR
TSSOP-14P
I2C_+3_3V
CSH
R6 12.4kΩ R1608
WA
WB
R7 10kΩ R1608
R8 10kΩ R1608
C4 0.1μF C1608
R9 2.2kΩ R1608
R10 2.2kΩ R1608
R11 200kΩ R1608
U4
PCA9306DQER
SSOP-08P
I2C_SCL_3V3
I2C_SDA_3V3
C5 100pF C1608
VCC_IO_1V8
U5
BR24G02FVJ-3
TSSOP-08P
I2C_SCL_1V8
I2C_SDA_1V8
C6 0.1μF C1608
C7 0.1μF C1608
EX_LCN1
12505WR-07A00
07P 1.25mm/Pitch
ILL_PW
VCC_ILLUM_DRV_3V3_IN
VCC_ILLUM_DRV_1V8_IN
ILLUM_N
ILLUM_EN
DGND
S_GND
Title
ZV-TI768TOF_TOF_CAMERA
Size B
Document Number
IR_LED DRIVER BOARD
Rev V02
Date: Friday, March 17, 2017
Sheet 1 of 1