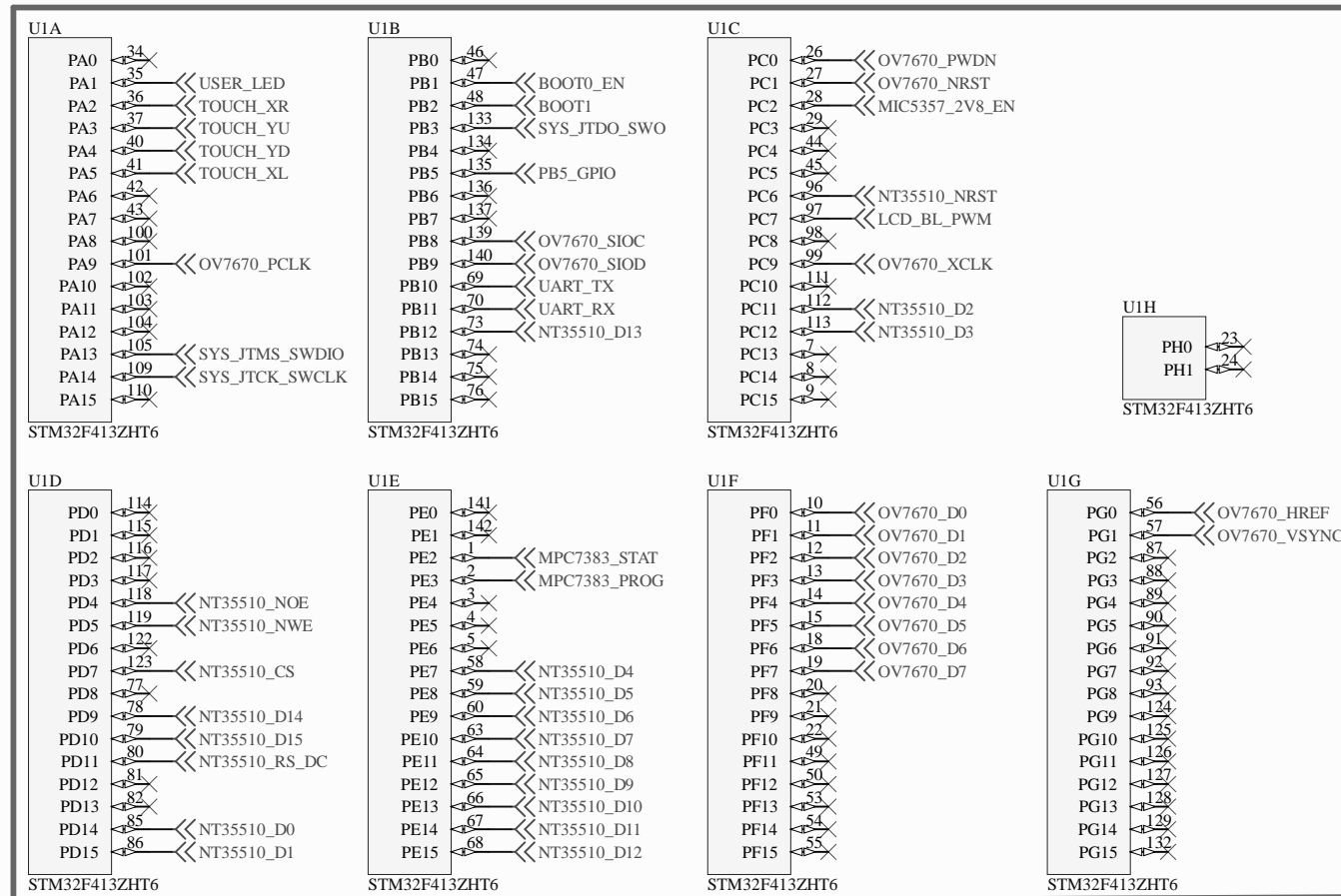


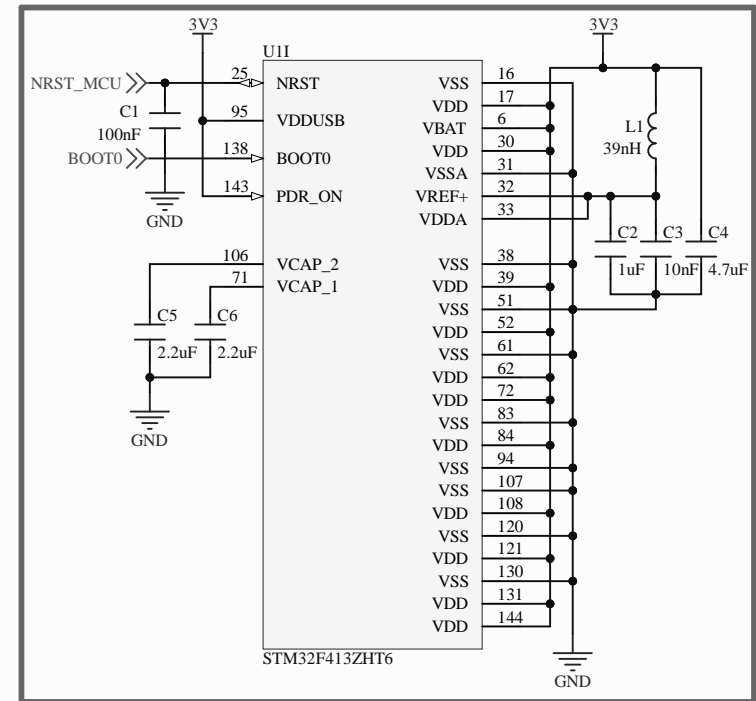
## MCU GPIO ports



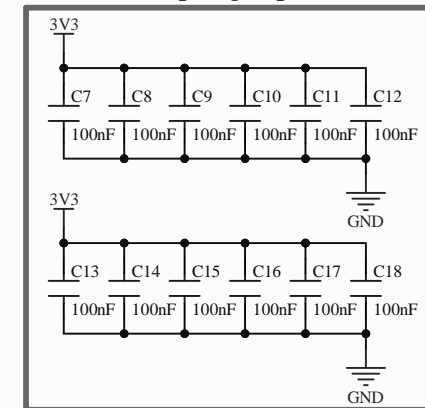
Net name	Pin	Mode	Pull-Up-Down	
BOOT0_EN	PB1	Output, PP	No	Active high
NT35510_NRST	PC6	Output, OD	No	Active low
LCD_BL_PWM	PC7	TIM3 PWM CH2, OD	No	
OV7670_NRST	PC1	Output, OD	No	Active low
OV7670_PWDN	PC0	Output PP	No	Active high
MIC5357_2V8_EN	PC2	Output PP	No	Active high
MCP73831_PROG	PE3	Output OD	No	Active low
MCP73831_STAT	PE2	Input	No	Tri-state
TOUCH_XR	PA2	ADC1_IN2 & Output PP	No	High/Analog
TOUCH_YU	PA3	ADC1_IN3 & Output PP & EXT13	Yes	High/Analog
TOUCH_YD	PA4	Output & Input	No	Low/Open
TOUCH_XL	PA5	Output & Input	No	Low/Open
USER_LED	PA1	Output pp	No	Active high

Net name	Pin	Mode
USART6_TX/RX OV7670_SIOC/D	PB10/11 PB8/9	USB serial comm & bootloader interface I2C1 SCL/SDA - SCCB
OV7670_XCLK OV7670_PCLK	PC9 PA9	RCC_MCO2 TIM1_CH2 Trigger source
OV7670_VSYNC OV7670_HREF	PG1 PG0	EXTI1 EXTI0

## MCU power, boot & reset



### MCU decoupling capacitors

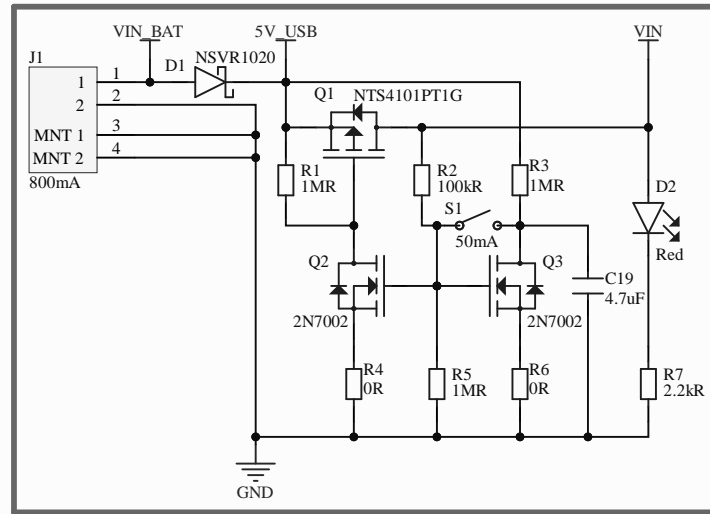


## A: Schematics

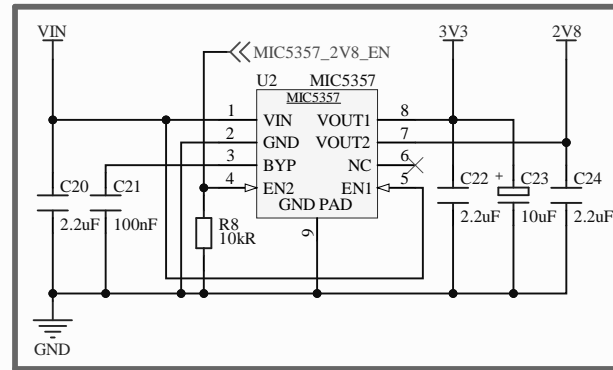
Title <b>ARM based Smart Video Intercom System</b>			FERI UM Koroška cesta 46 2000 Maribor Slovenia mario.gavran@student.um.si
Size: A4	Number: 1	Revision: 0.1	
Date: 5/23/2022	Sheet 1 of 2		



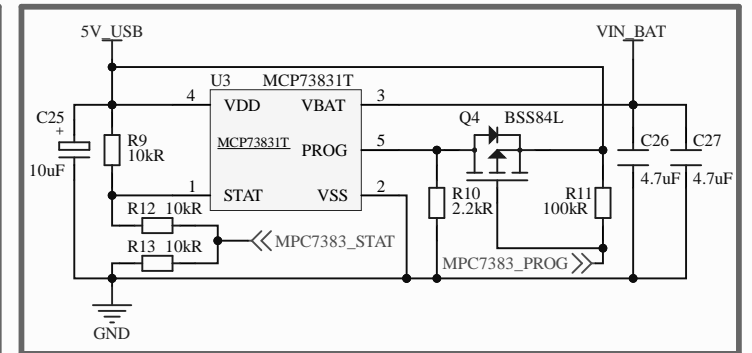
## Battery connector & push button latch



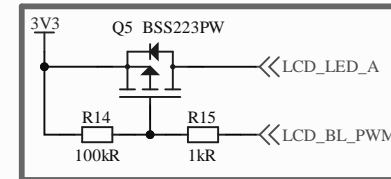
## LDO power supply



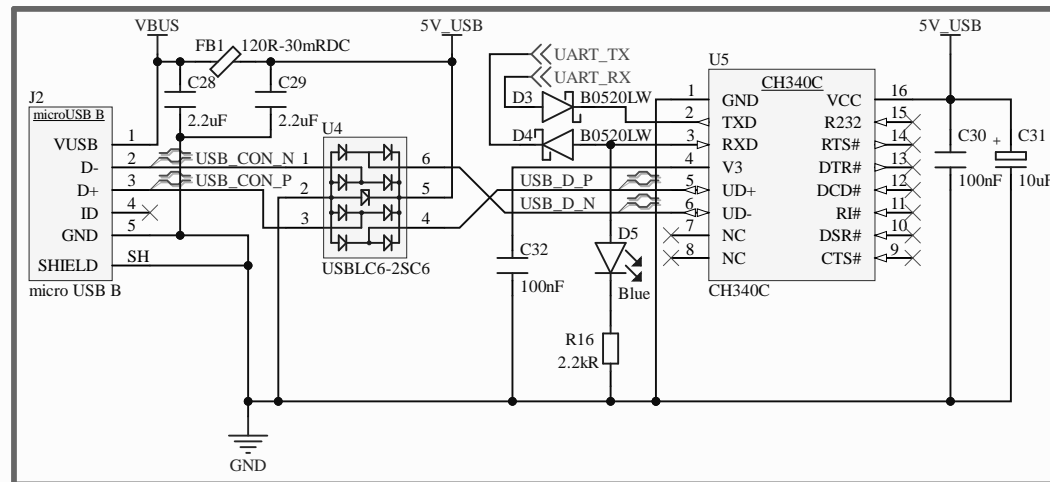
## Battery charger



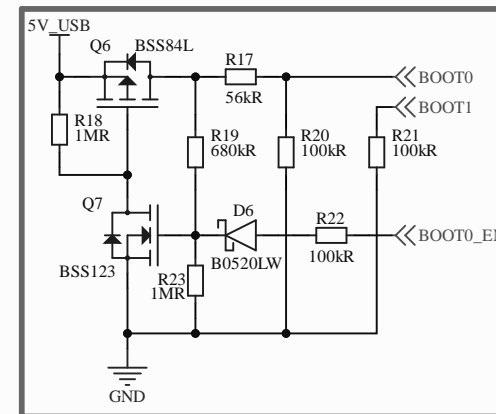
## PWM LCD backlight control



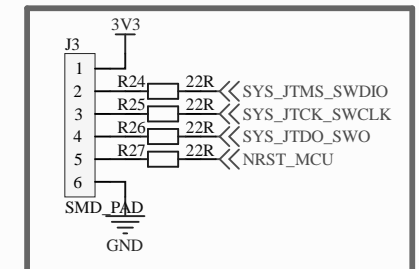
## USB to serial communication



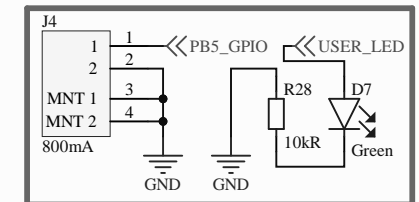
## BOOT0 select latch



## SWD connector



## GPIO connector and user LED



## A: Schematics

Title **ARM based Smart Video Intercom System**

Size: A4

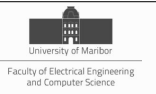
Number: 1

Revision: 0.1

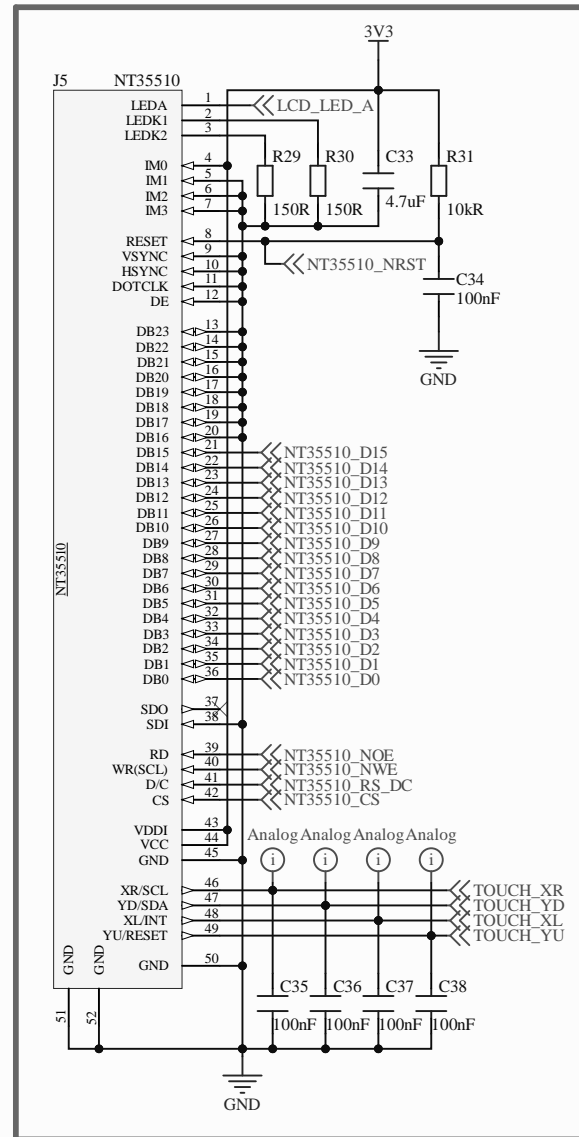
Date: 5/23/2022

Sheet 2 of 3

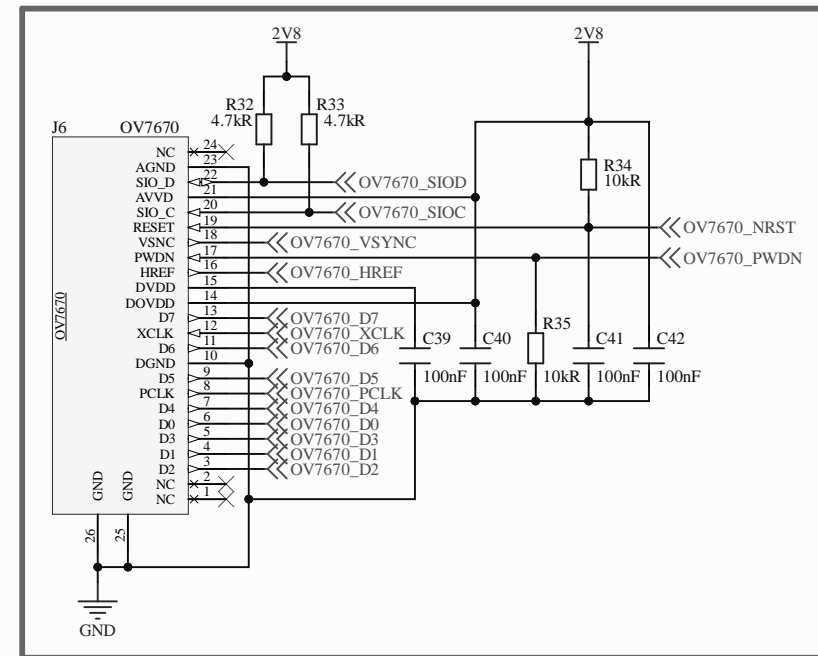
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Slovenia  
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### WVGA LCD controller



### VGA Camera



## A: Schematics

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Size: A4	Number: 1	Revision: 0.1	
Date: 5/23/2022		Sheet 3 of 3	

