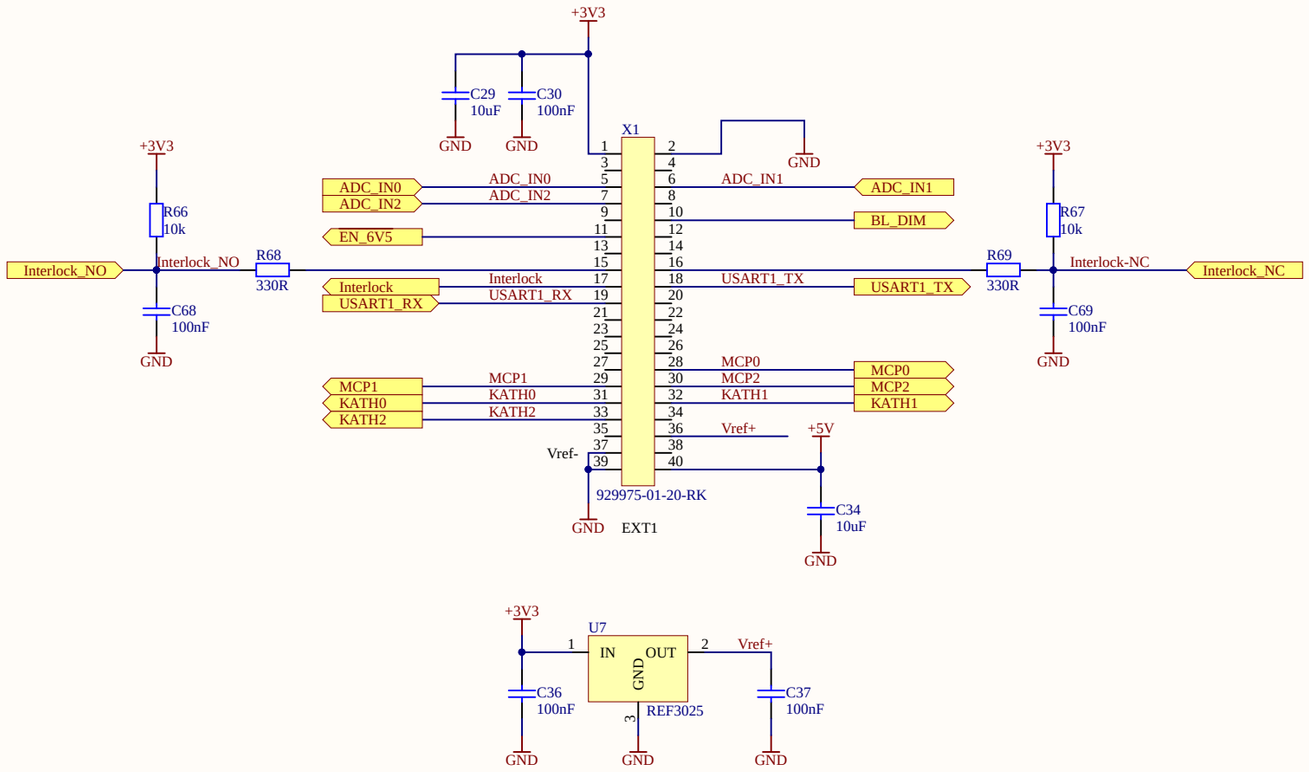
U_HV Power supplies
HV Power supplies.SchDoc
HV0
HV1
HV2
HV_measure_0
HV_measure_1
HV_measure_2
DAC_CS
SPI1_MOSI
SPI1_MISO
SPI1_SCLK
U_Analog in
Analog in.SchDoc
HV_measure_0
HV_measure_1
HV_measure_2
ADC_IN0
ADC_IN1
ADC_IN2
U_Power supplies
Power supplies.SchDoc
Vin
Return
EN_6V5
Interlock_NO
X3
1
2
43650-0200
Interlock_NO
U_Microcontroller
Microcontroller.SchDoc
EN_6V5
SPI1_SCLK
SPI1_MISO
SPI1_MOSI
DAC_CS
ADC_IN2
ADC_IN1
ADC_IN0
U11
1
2
3
4
5
6
HDR-6
GND
R37 330R
R40 330R
D3
PESD3V3S2UT,215
USART1_RX
USART1_TX
MCP0
KATH0
MCP1
KATH1
MCP2
KATH2
+5V
K1
104-1-A-5/3D
HV0
MCP-IN07
MCP0
Q4
DMN6140L
R35
10k
GND
K2
GND
KATH0
Q5
R36
10k
K3
HV1
MCP-IN17
MCP1
Q6
R38
10k
K4
KATH1
Q7
R39
10k
K5
HV2
MCP-IN27
MCP2
Q8
R41
10k
K6
KATH2
Q9
R42
10k
U_User Interface
User Interface.SchDoc
SPI3_SCLK
SPI3_MOSI
LCD_CS
LCD_RS
Column-1
Column-2
Column-3
Column-4
Row-A
Row-B
Row-C
Row-D
BL_DIM
X6
90136-1102
+12V
L7
BLM18AG601
C65
100nF
C66
100nF
Q10
D14
DMN6140L
GSOT15-E3-08
Interlock
R70
10k
X7
90136-1103
Interlock_NO
Interlock_NC
D13
PESD3V3S2UT,215
X8
M3498-99
X9
M3498-98
X10
M3498-99
X12
M3498-99
X14
M3498-99
X15
M3498-99
X16
M3498-99
MP1
MP2
MP3
MP4
MP5
MP6
M3, Length 14mm
MP7
MP8
MP9
MP10
M2, Length 3mm
SN1
Serial Number
PCB1
MLA-0387-P0-PA1
FID1
FID2
FID3
FID4
FID5
FID6

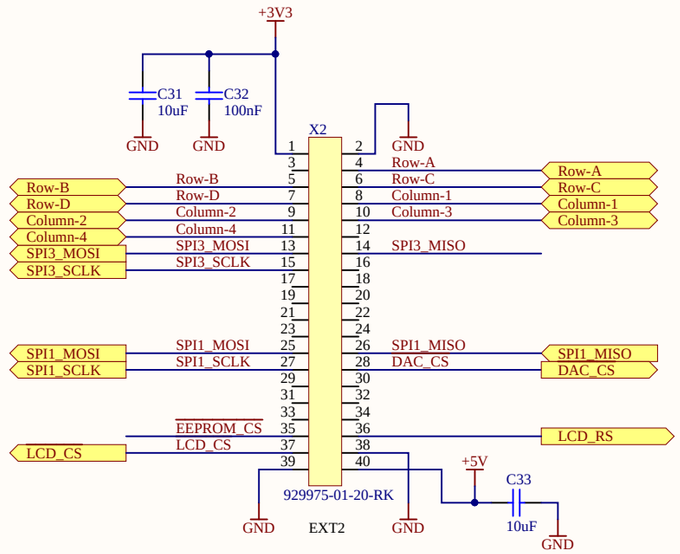
Micro-Key
Embedded Technology Experts

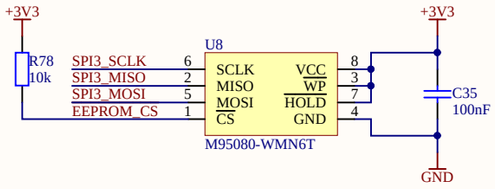
Title:
HSB MRTS Kathode-MCP Top

Drawn: TLa	Number: 1.	Rev:MLA-0387-A0 PA0
Checked: GSc	Date: 23-8-2017	Sheet:1 of: 6
File: Top.SchDoc		



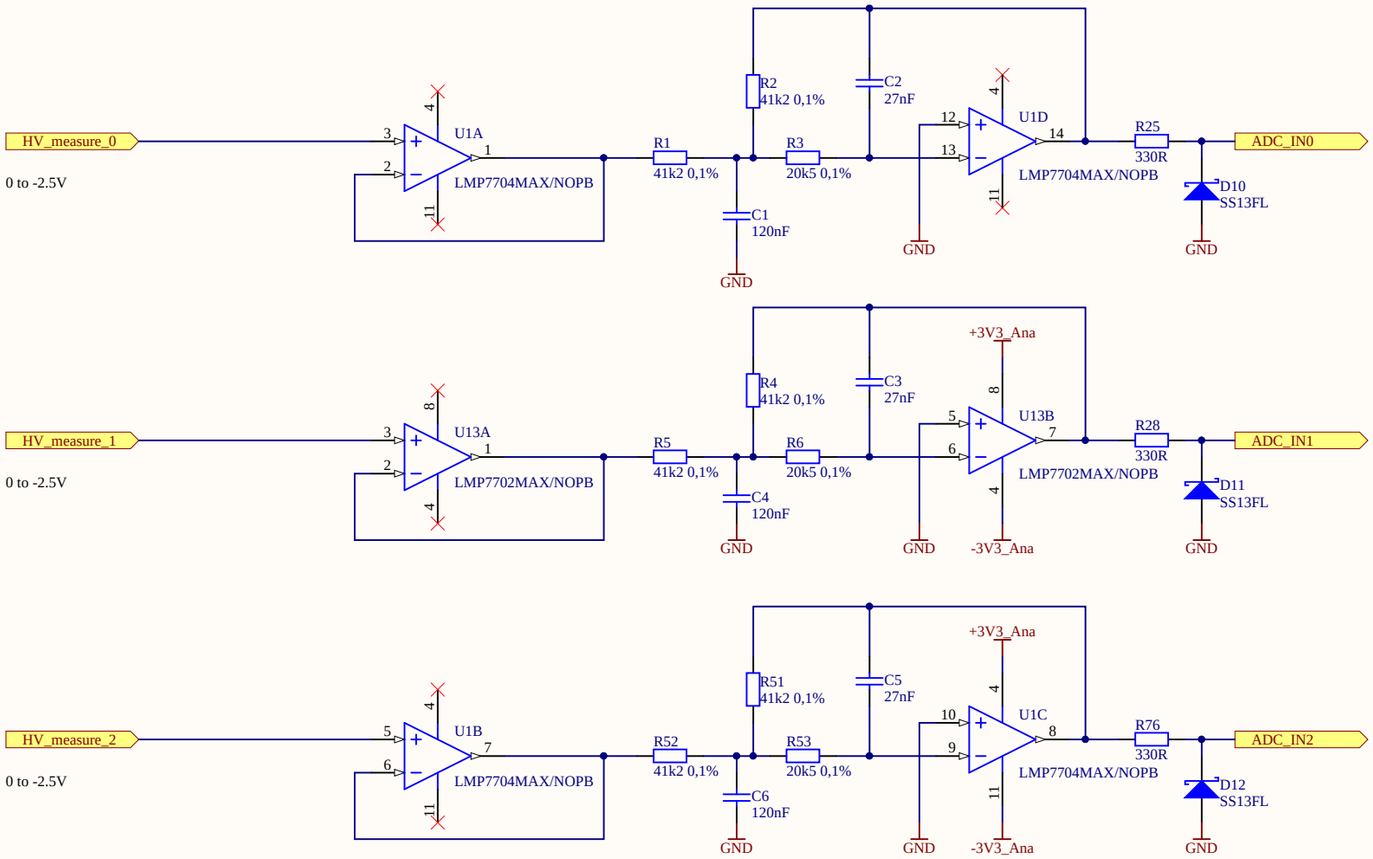
ADC 2V5 reference voltage



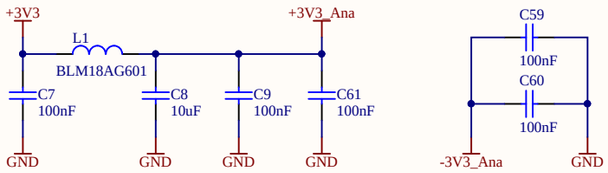


Remove jumper PWR_SEL
Remove resistor R2

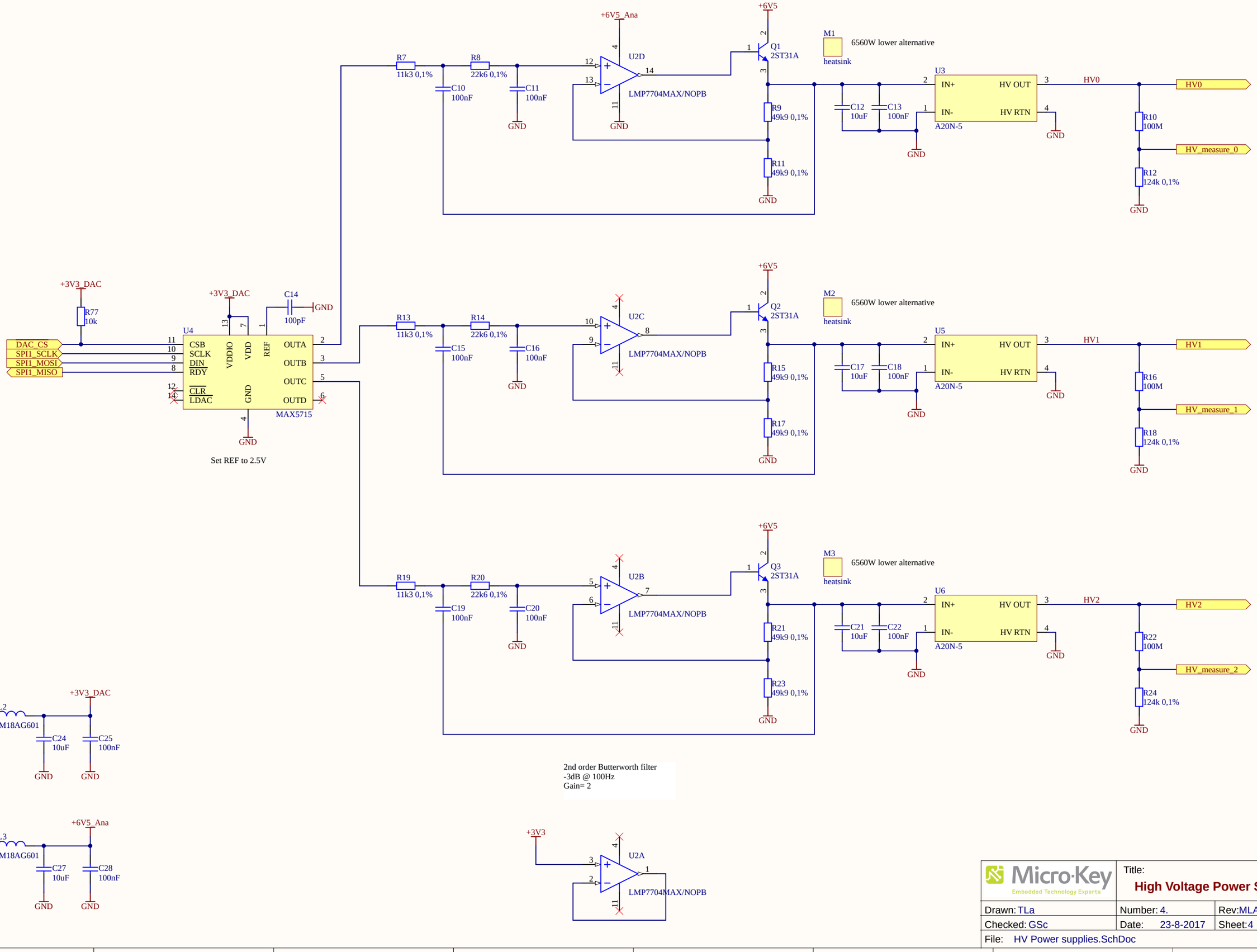
Micro·Key Embedded Technology Experts	Title: **Microcontroller**	
Drawn: TLa	Number: 2.	Rev:MLA-0387-A0 PA0
Checked: GSc	Date: 23-8-2017	Sheet:2 of: 6
File: Microcontroller.SchDoc		



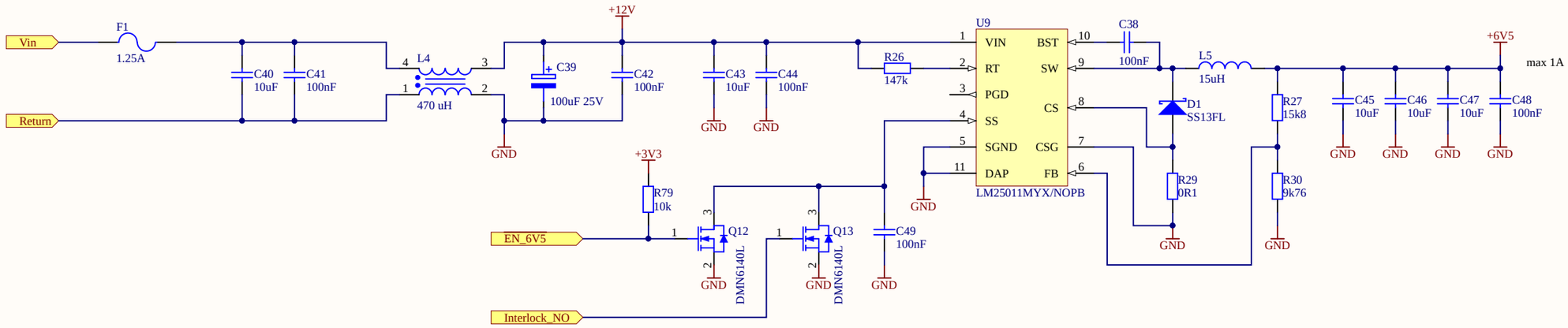
2nd order Butterworth filter
-3dB @ 100Hz
Gain= 1

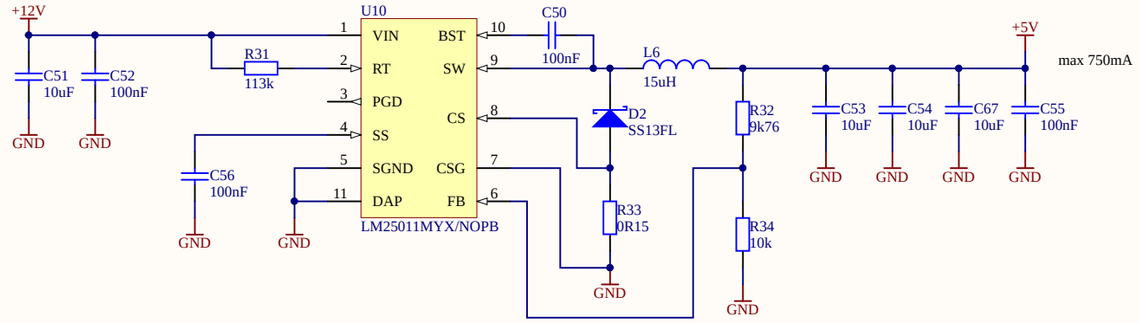


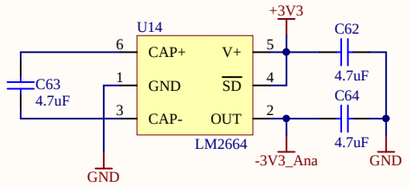
Micro-Key Embedded Technology Experts	Title: **Analog In**	
Drawn: TLa	Number: 3.	Rev:MLA-0387-A0 PA0
Checked: GSc	Date: 23-8-2017	Sheet:3 of: 6
File: Analog in.SchDoc		



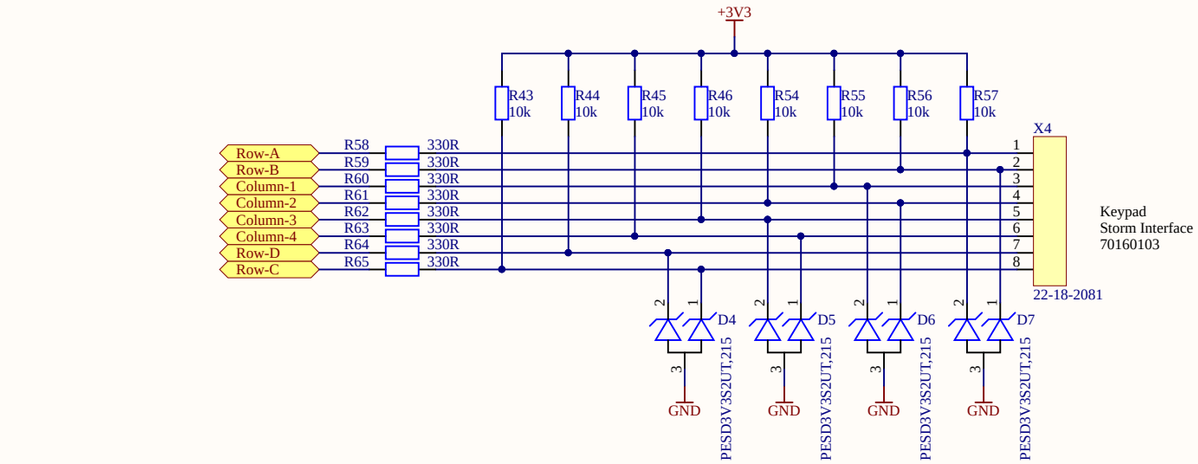
Micro·Key Embedded Technology Experts	Title: **High Voltage Power Supplies**	
Drawn: TLa	Number: 4.	Rev: MLA-0387-A0 PA0
Checked: GSc	Date: 23-8-2017	Sheet: 4 of: 6
File: HV Power supplies.SchDoc		

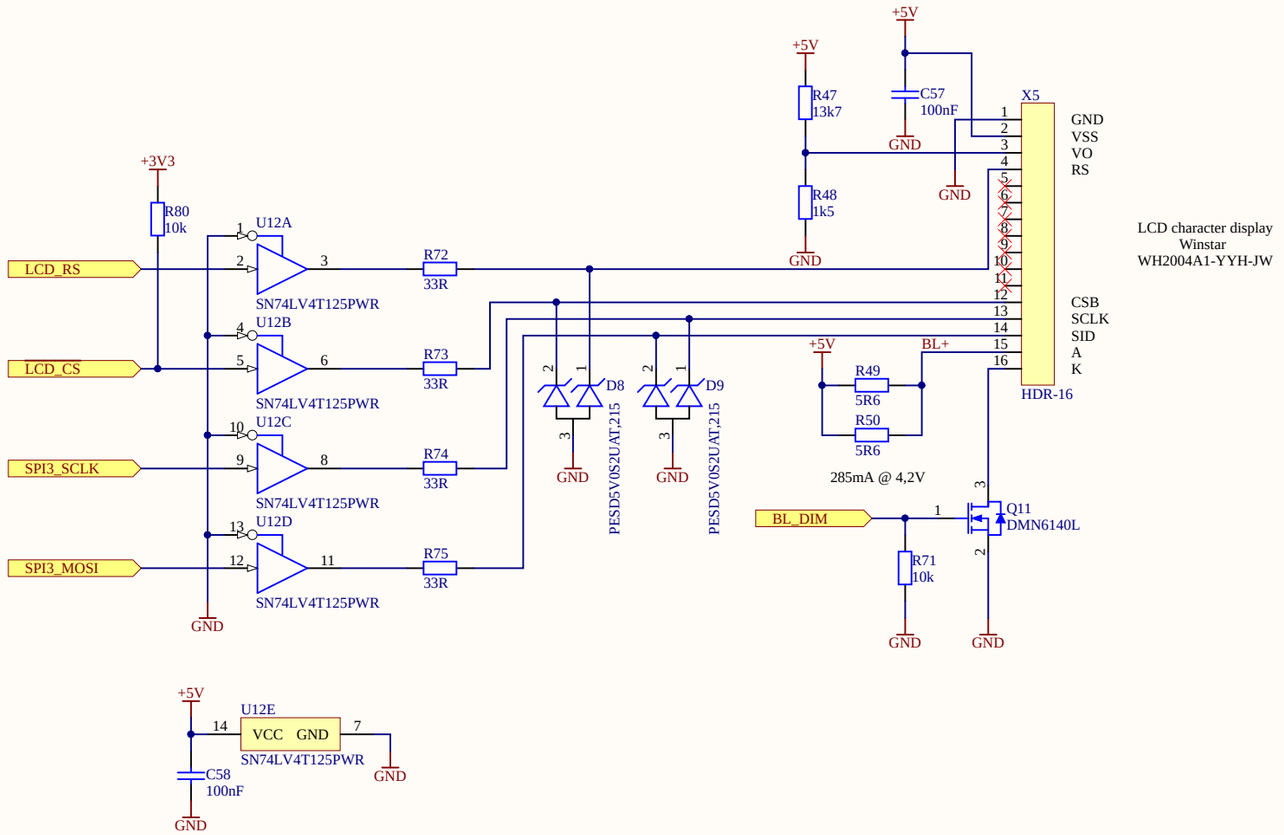






Micro·Key Embedded Technology Experts	Title: **Power Supplies**	
Drawn: TLa	Number: 5.	Rev: MLA-0387-A0 PA0
Checked: GSc	Date: 23-8-2017	Sheet: 5 of: 6
File: Power supplies.SchDoc		





Micro·Key Embedded Technology Experts	Title: **User Interface**		
Drawn: TLa	Number: 6.	Rev: MLA-0387-A0 PA0	
Checked: GSc	Date: 23-8-2017	Sheet: 6 of: 6	
File: User Interface.SchDoc			