

Main Board Power

Project: SmartBoard

Size: A4

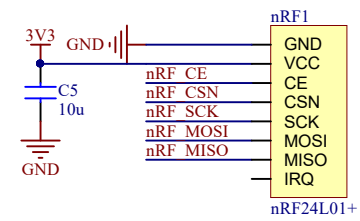
Rev.: v1

Drawn by: M. Schwegler

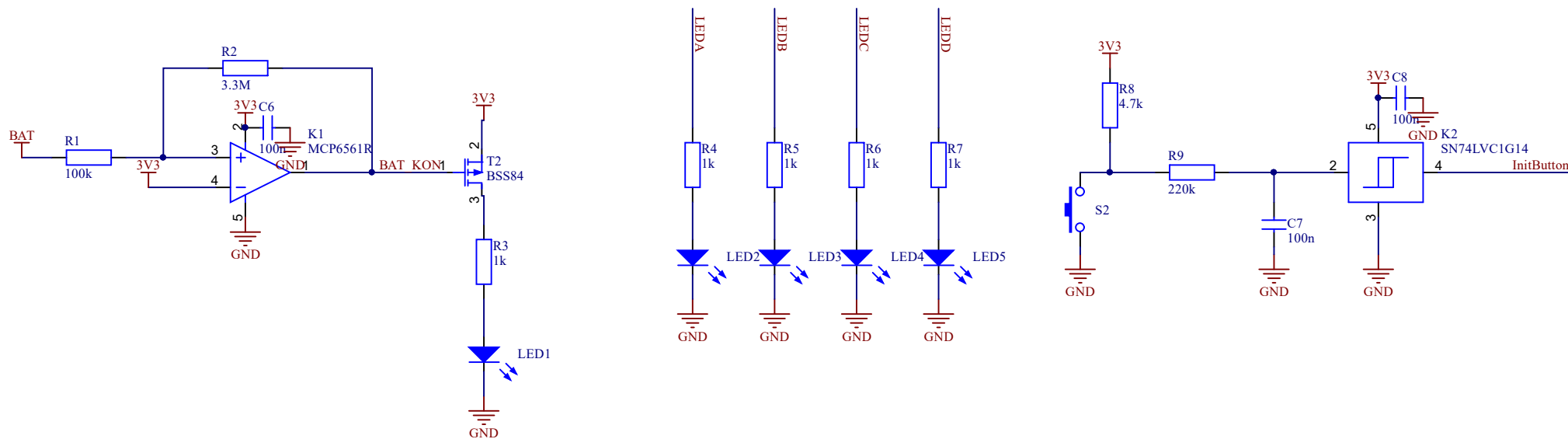
Sheet 1 of 5

Date: 03.04.2017

File: MainBoard Power.SchDoc



File: MainBoard MCU RF.SchDoc



Main Board HMI

Project: SmartBoard

Size: A4

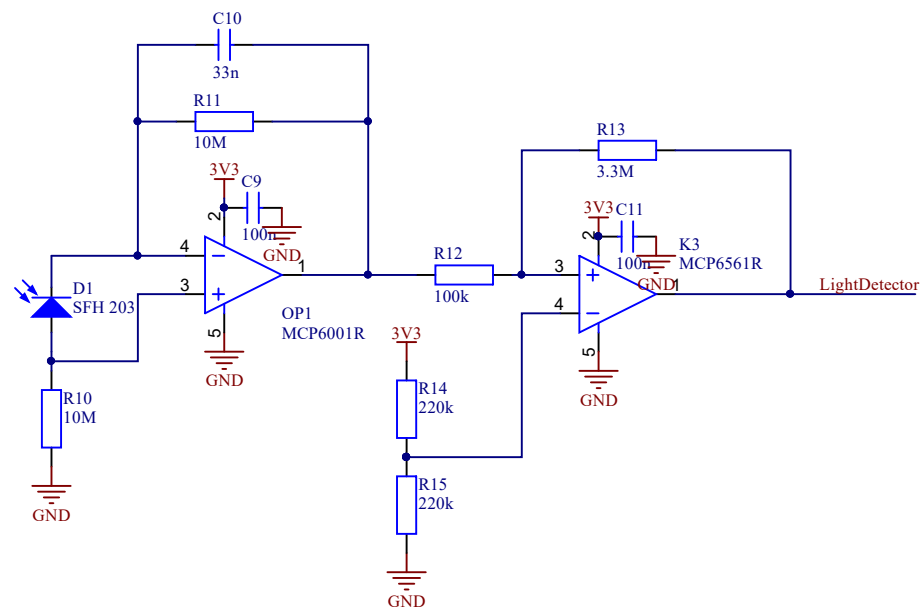
Rev.: v1

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Date: 03.04.2017

File: MainBoard HMI.SchDoc



Main Board Light Detector

Project: SmartBoard

Size: A4

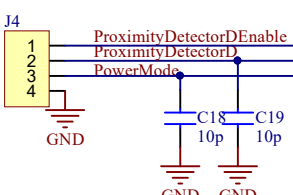
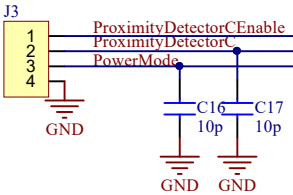
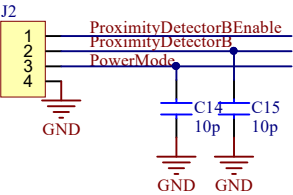
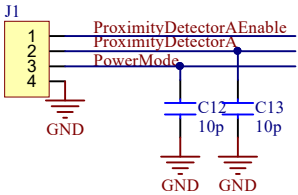
Rev.: v1

Drawn by: M. Schwegler

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Date: 03.04.2017

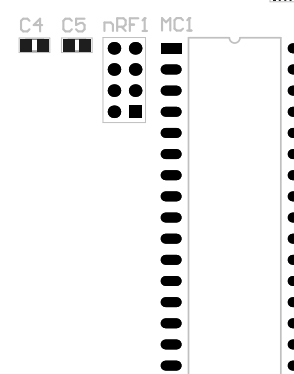
File: MainBoard_Light.SchDoc



Main Board Interface Proximity Detector

Project: SmartBoard	Size: A4	Rev.: v1
Drawn by: M. Schwegler	Sheet 5	of 5
Date: 03.04.2017	File: MainBoard Interface ProximityDetector.SchDoc	

C3 C2 BAT C1 T1 S1 U1



R15 R10 R14 OP1 D1 R12 K3 C11 C9 R13 R11 C10



LED1 LED2 LED3 LED4 LED5 R3 C7 S2 T2 R9 R4 R5 R6 R7 R1 K1 K2 C6 R8 C8 R2



Comment	Description	Designator	Footprint	LibRef	Quantity
3 x AA		BAT	SIP2	BATTERY	1
10u	Normaler Kondensator	C1, C2, C5	0805_C	C?	3
1u	Normaler Kondensator	C3	0805_C	C?	1
100n	Normaler Kondensator	C4, C6, C7, C8, C9, C11	0805_C	C?	6
33n	Normaler Kondensator	C10	0805_C	C?	1
10p	Normaler Kondensator	C12, C13, C14, C15, C16, C17, C18, C19	0805_C	C?	8
SFH 203	Photo_Diode_1A_2K	D1	LED_THT_5mm_RM_2.54 mm	Photo_Diode_1A_2K	1
Value		J1, J2, J3, J4	CON_THT_4P_RM2.54	CON_4P	4
MCP6561R		K1, K3	SOT23-5	OPAMP	2
SN74LVC1G14		K2	SOT23-5	schmitt	1
Value		LED1, LED2, LED3, LED4, LED5	LED_THT_3mm_RM_2.54 mm	LED	5
TinyK20		MC1	DIP32	TinyK20	1
nRF24L01+		nRF1	CON_THT_2x4P_RM2.54 _Stiftl	Bluefruit	1
MCP6001R		OP1	SOT23-5	OPAMP	1
100k	Normaler Widerstand	R1, R12	0805_R	R?	2
3.3M	Normaler Widerstand	R2, R13	0805_R	R?	2
1k	Normaler Widerstand	R3, R4, R5, R6, R7	0805_R	R?	5
4.7k	Normaler Widerstand	R8	0805_R	R?	1
220k	Normaler Widerstand	R9, R14, R15	0805_r	R?	3
10M	Normaler Widerstand	R10, R11	0805_R	R?	2
SW SPST		S1	SIP2	SW SPST	1
S2		S2	SIP2	SW-PB	1
BSS84	MOSFET-P 1G,2D,3S (Diode), MOSFET-P 1D,2G,3S	T1, T2	SOT23-3	MOSFET-P 1G,2D,3S (Diode), MOSFET-P 1D,2G,3S	2
MCP1252-33		U1	MSOP8	VOLTREG	1