

Main Board Power

Project: SmartBoard

Size: A4

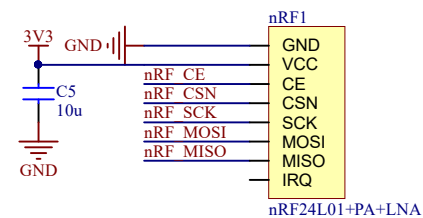
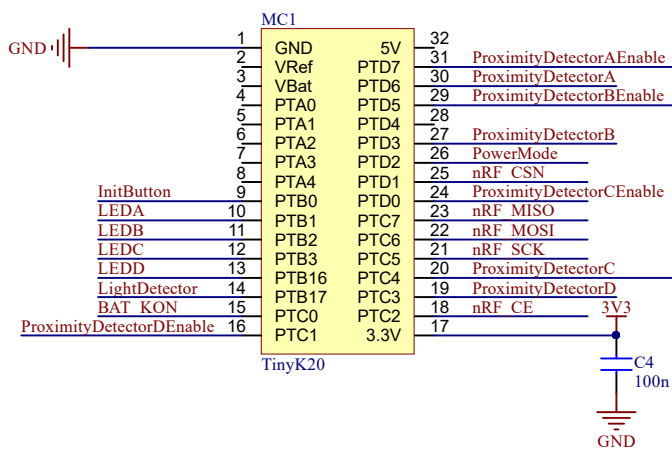
Rev.: v2

Drawn by: M. Schwegler

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Date: 23.05.2017

File: MainBoard Power.SchDoc



Main Board MCU and nRF24L01+

Project: SmartBoard

Size: A4

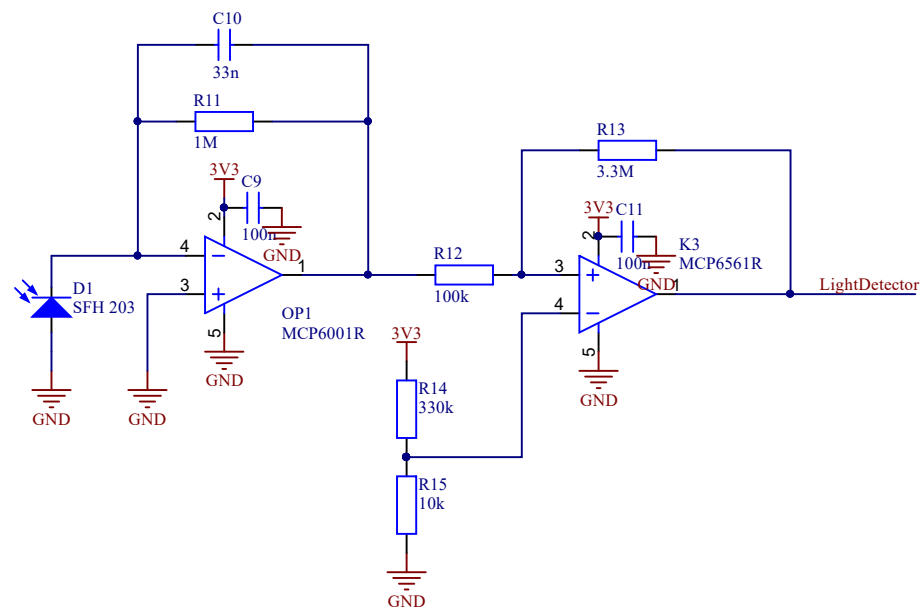
Rev.: v2

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Date: 23.05.2017

File: MainBoard MCU RF.SchDoc



Main Board Light Detector

Project: SmartBoard

Size: A4

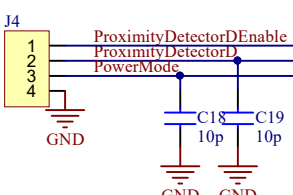
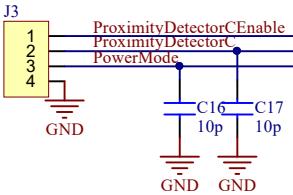
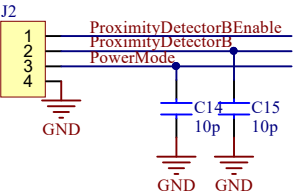
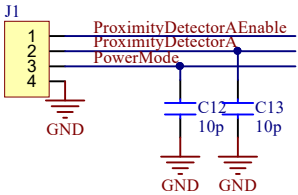
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Date: 23.05.2017

File: MainBoard_Light.SchDoc



Main Board Interface Proximity Detector

Project: SmartBoard	Size: A4	Rev.: v2
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LED2 LED3 LED4 LED5



J1



J2



J3



J4



MC1

00000000000000000000



00000000000000000000

nRF1



LED1



S2



D1



S1



SmartBoard
Main Board v2

M. Schwegler

FS17

FS17

Comment	Description	Designator	Footprint	LibRef	Quantity
3 x AA		BAT	POWER2	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+PA+LNA		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
820	Normaler Widerstand	R3, R4, R5, R6, R7	0805_R	R?	5
4.7k	Normaler Widerstand	R8	0805_R	R?	1
220k	Normaler Widerstand	R9	0805_r	R?	1
1M	Normaler Widerstand	R11	0805_R	R?	1
330k	Normaler Widerstand	R14	0805_R	R?	1
10k	Normaler Widerstand	R15	0805_R	R?	1
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