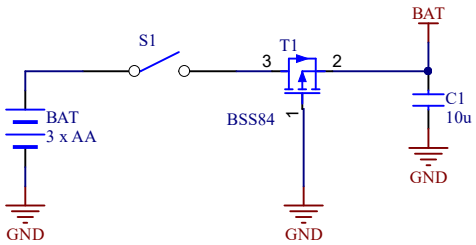
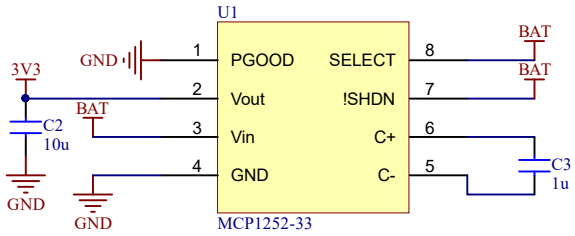
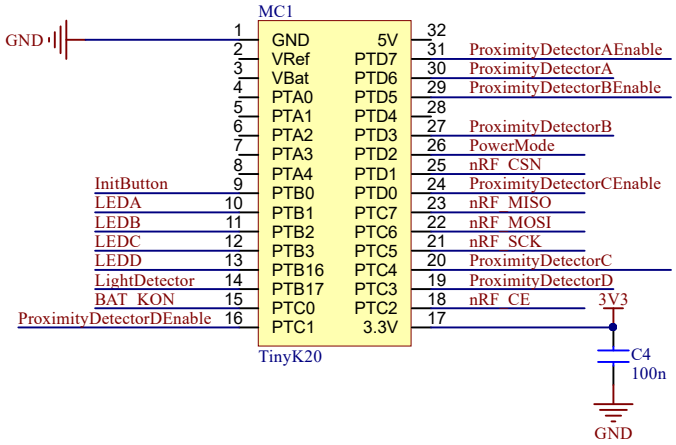
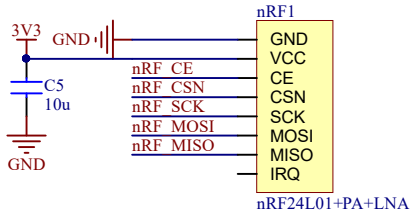


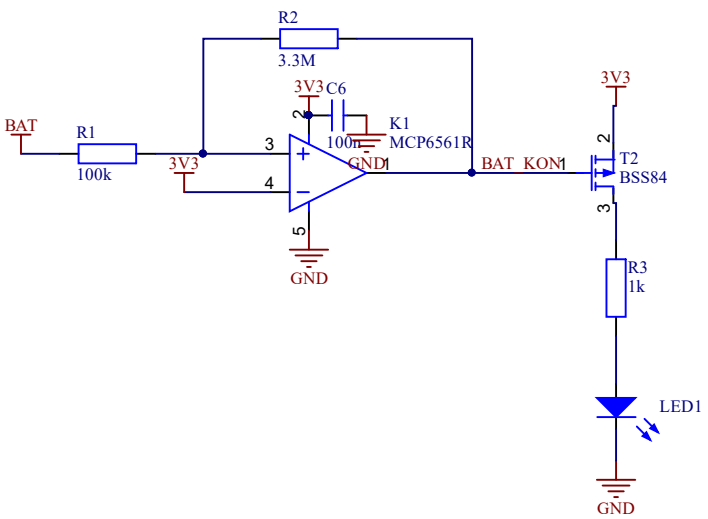

| | | |
|---|---|---|
| **Main Board Power** | | |
| Project: SmartBoard | Size: A4 | Rev.: v1 |
| Drawn by: M. Schwegler | Sheet 1 of 5 | |
| Date: 04.04.2017 File: MainBoard_Power.SchDoc | | |

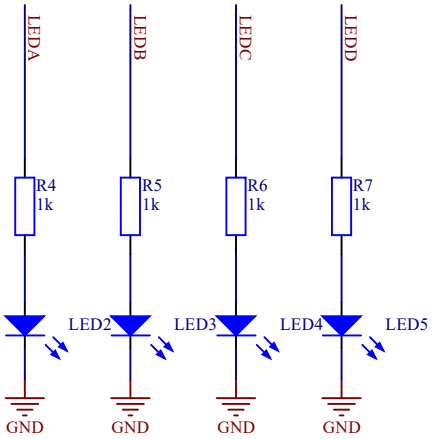


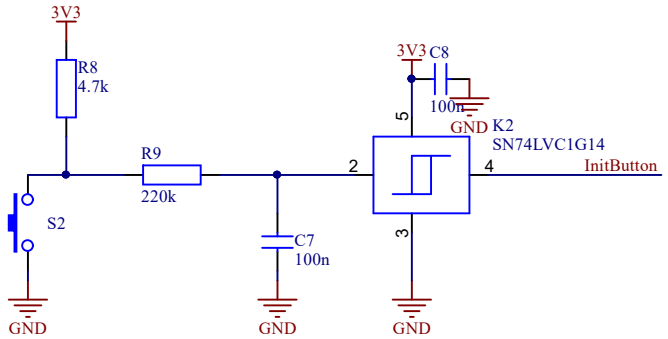




**Main Board MCU and nRF24L01+**

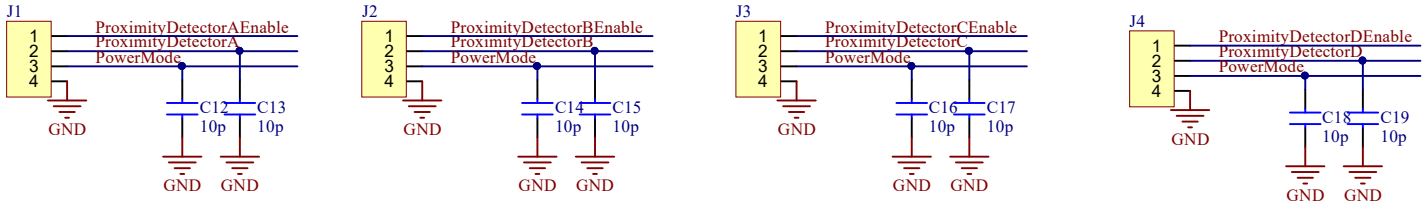
| | | |
|---|---|---|
| Project: SmartBoard | Size: A4 | Rev.: v1 |
| Drawn by: M. Schwegler | Sheet 2 of 5 | |
| Date: 04.04.2017 File: MainBoard_MCU_RF.SchDoc | | |



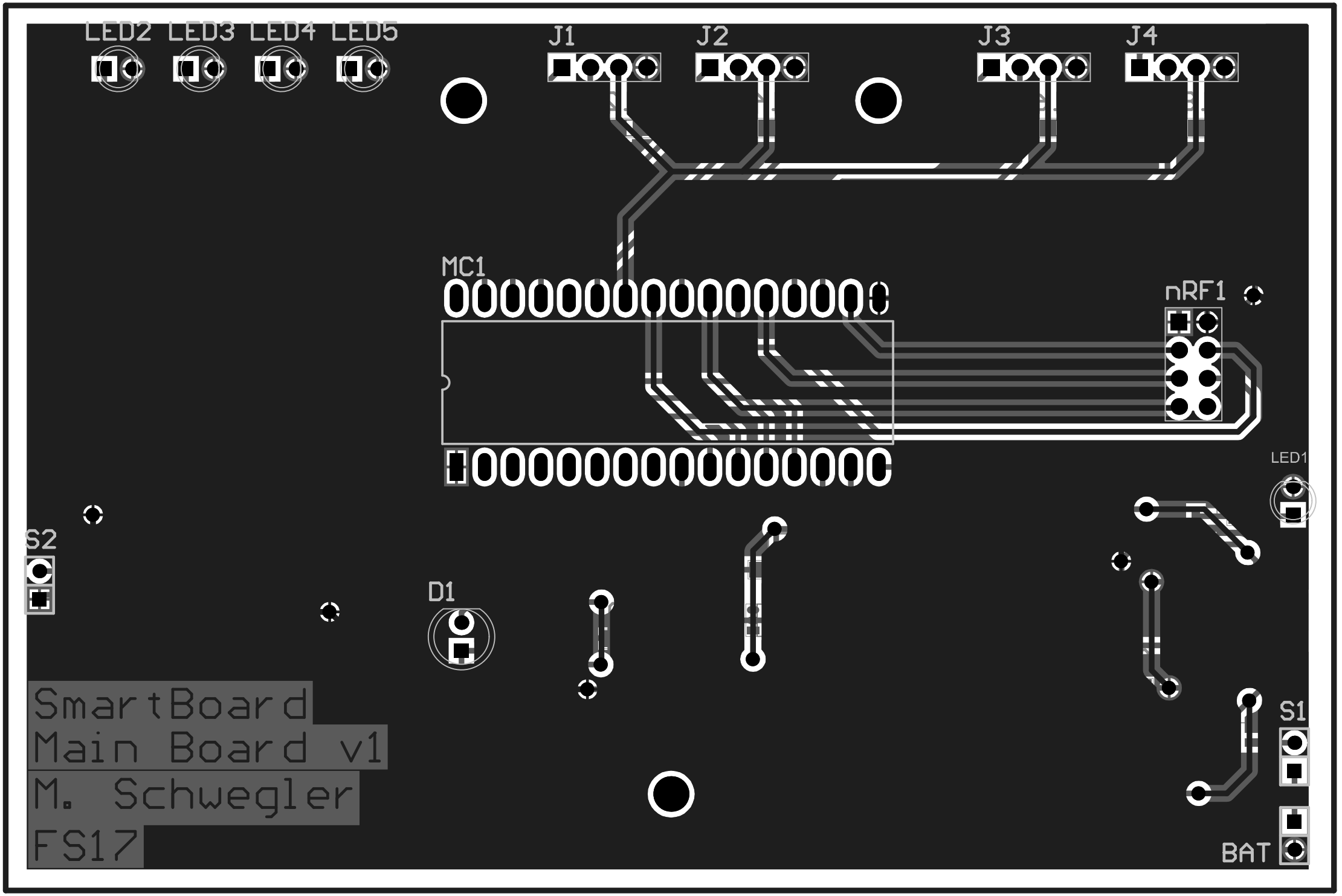




| | | |
|---|---|---|
| **Main Board HMI** | | |
| Project: SmartBoard | Size: A4 | Rev.: v1 |
| Drawn by: M. Schwegler | Sheet 3 of 5 | |
| Date: 04.04.2017 File: MainBoard_HMI.SchDoc | | |




| | | |
|---|---|---|
| **Main Board Interface Proximity Detector** | | |
| Project: SmartBoard | Size: A4 | Rev.: v1 |
| Drawn by: M. Schwegler | Sheet 5 of 5 | |
| Date: 04.04.2017 | File: MainBoard_Interface_ProyimityDetector.SchDoc | |

| Title | | |
|---|---|---|
| Size<br>A4 | Number | Revision |
| Date: 04.04.2017 | | Sheet of |
| File: C:\Users\..\MainBoard_Light.SchDoc | | Drawn By: |


LED2
LED3
LED4
LED5
J1
J2
J3
J4
MC1
nRF1
LED1
S2
D1
S1
BAT
SmartBoard
Main Board v1
M. Schwegler
FS17

| 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 | 0805_C | C? | 4 |
| 10p | Normaler Kondensator | C12, C13, C14, C15, C16, C17, C18, C19 | 0805_C | C? | 8 |
| Value | | J1, J2, J3, J4 | CON_THT_4P_RM2.54 | CON_4P | 4 |
| MCP6561R | | K1 | SOT23-5 | OPAMP | 1 |
| 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 |
| 100k | Normaler Widerstand | R1 | 0805_R | R? | 1 |
| 3.3M | Normaler Widerstand | R2 | 0805_R | R? | 1 |
| 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 | 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 |
| | | | | | |