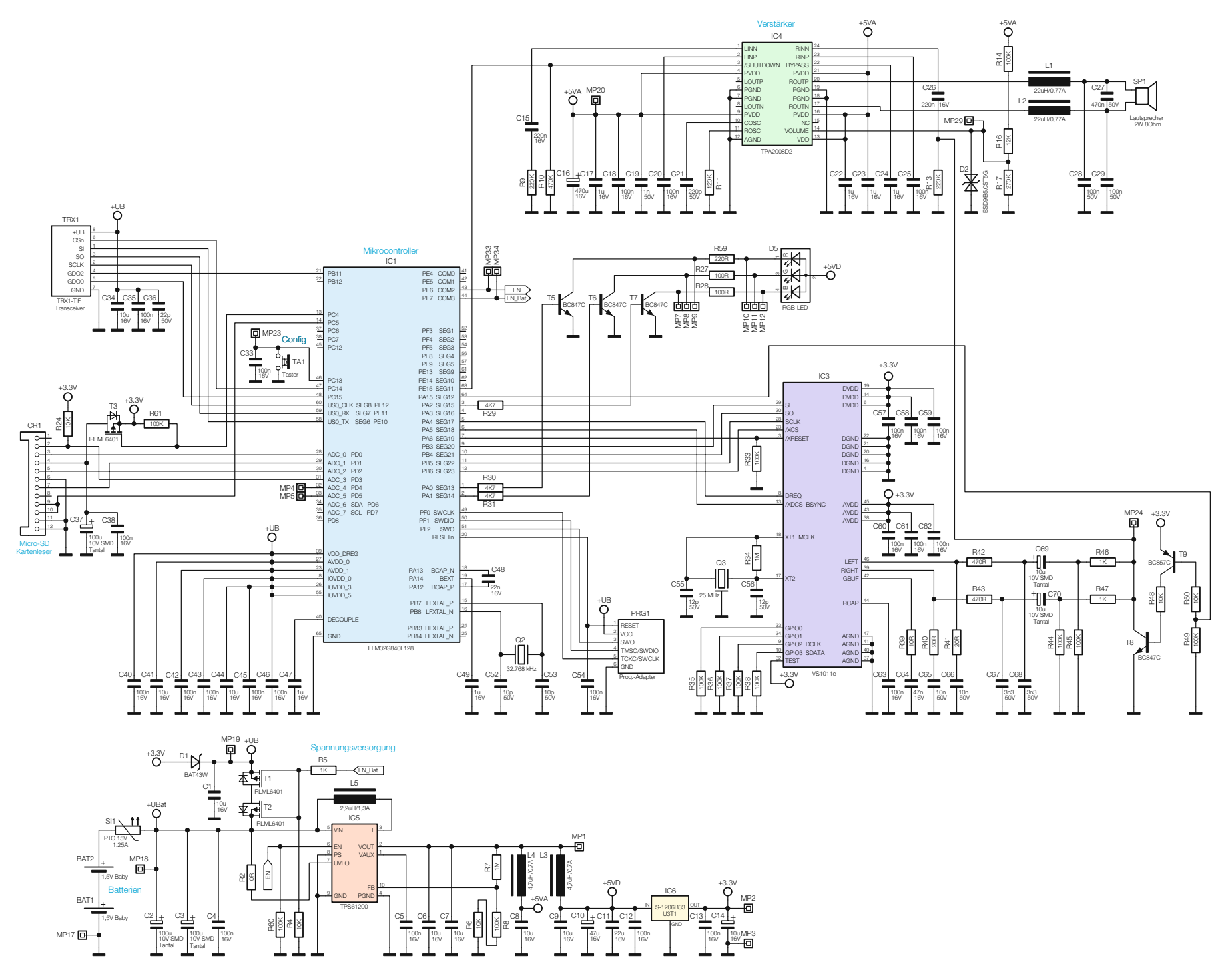
Verstärker
IC4
TPA2008D2
LINN
LINP
/SHUTDOWN
PVDD
LOUTP
PGND
PGND
LOUTN
PVDD
COSC
ROSC
AGND
RINN
RINP
BYPASS
PVDD
ROUTP
PGND
PGND
ROUTN
PVDD
NC
VOLUME
VDD
+5VA
MP20
C15 220n 16V
C16 470u 16V
+C17 1u 16V
C18 100n 16V
C19 1n 50V
C20 100n 16V
C21 220p 50V
R9 220K
R10 470K
R11 220K
C22 1u 16V
C23 1u 16V
C24 1u 16V
C25 100n 16V
R13 220K
C26 220n 16V
R14 100K
L1 22uH/0,77A
L2 22uH/0,77A
C27 470n 50V
SP1
Lautsprecher 2W 8Ohm
MP29
R16 12K
R17 270K
D2
ESD9B5.0ST5G
C28 100n 50V
C29 100n 50V
+UB
TRX1
+UB
CSn
SI
SO
SCLK
GDO2
GDO0
GND
TRX1-TIF Transceiver
C34 10u 16V
C35 100n 16V
C36 22p 50V
Mikrocontroller
IC1
EFM32G840F128
PB11
PB12
PC4
PC5
PC6
PC7
PC12
PC13
PC14
PC15
US0_CLK SEG8 PE12
US0_RX SEG7 PE11
US0_TX SEG6 PE10
ADC_0 PD0
ADC_1 PD1
ADC_2 PD2
ADC_3 PD3
ADC_4 PD4
ADC_5 PD5
ADC_6 SDA PD6
ADC_7 SCL PD7
PD8
VDD_DREG
AVDD_0
AVDD_1
IOVDD_0
IOVDD_3
IOVDD_5
DECOUPLE
GND
PE4 COM0
PE5 COM1
PE6 COM2
PE7 COM3
PF3 SEG1
PF4 SEG2
PF5 SEG3
PE8 SEG4
PE9 SEG5
PE13 SEG9
PE14 SEG10
PE15 SEG11
PA15 SEG12
PA2 SEG15
PA3 SEG16
PA4 SEG17
PA5 SEG18
PA6 SEG19
PB3 SEG20
PB4 SEG21
PB5 SEG22
PB6 SEG23
PA0 SEG13
PA1 SEG14
PF0 SWCLK
PF1 SWDIO
PF2 SWO
RESETn
PA13 BCAP_N
PA14 BEXT
PA12 BCAP_P
PB7 LFXTAL_P
PB8 LFXTAL_N
PB13 HFXTAL_P
PB14 HFXTAL_N
MP33
MP34
EN
EN_Bat
MP23
Config
C33 100n 16V
TA1
Taster
R29 4K7
R30 4K7
R31 4K7
MP4
MP5
C48 22n 16V
Q2 32.768 kHz
C49 1u 16V
C52 10p 50V
C53 10p 50V
C54 100n 16V
PRG1
RESET
VCC
SWO
TMSC/SWDIO
TCKC/SWCLK
GND
Prog.-Adapter
C40 100n 16V
C41 10u 16V
C42 100n 16V
C43 100n 16V
C44 10u 16V
C45 100n 16V
C46 100n 16V
C47 1u 16V
T5 BC847C
T6 BC847C
T7 BC847C
R59 220R
R27 100R
R28 100R
D5
RGB-LED
MP7
MP8
MP9
MP11
MP10
MP12
+5VD
+3.3V
CR1
Micro-SD Kartenleser
R24 10K
T3
IRLML6401
R61 100K
C37 100u 10V SMD Tantal
C38 100n 16V
IC3
VS1011e
SI
SO
SCLK
/XCS
/XRESET
DREQ
/XDCS BSYNC
XT1 MCLK
XT2
GPIO0
GPIO1
GPIO2 DCLK
GPIO3 SDATA
TEST
DVDD
DVDD
DVDD
DGND
DGND
DGND
DGND
DGND
AVDD
AVDD
AVDD
LEFT
RIGHT
GBUF
RCAP
AGND
AGND
AGND
AGND
C57 100n 16V
C58 100n 16V
C59 100n 16V
C60 100n 16V
C61 100n 16V
C62 100n 16V
R33 100K
R34 1M
Q3 25 MHz
C55 12p 50V
C56 12p 50V
R35 100K
R36 100K
R37 100K
R38 100K
C63 100n 16V
C64 47n 16V
C65 10n 50V
C66 10n 50V
C67 3n3 50V
C68 3n3 50V
R42 470R
R43 470R
C69 10u 10V SMD Tantal
C70 10u 10V SMD Tantal
R46 1K
R47 1K
R39 10R
R40 20R
R41 20R
R44 100K
R45 100K
MP24
T9 BC857C
T8 BC847C
R48 10K
R50 10K
R49 100K
Spannungsversorgung
MP19
+UB
+3.3V
D1 BAT43W
C1 10u 16V
T1 IRLML6401
T2 IRLML6401
R5 1K
EN_Bat
L5 2,2uH/1,3A
+UBat
SI1 PTC 15V 1,25A
IC5 TPS61200
VIN
EN
PS
UVLO
GND
L
VOUT
VAUX
FB
PGND
R2 0R
EN
R7 1M
L4 4,7uH/0,7A
L3 4,7uH/0,7A
MP1
BAT2 1,5V Baby
MP18
Batterien
BAT1 1,5V Baby
MP17
C2 100u 10V SMD Tantal
C3 100u 10V SMD Tantal
C4 100n 16V
R60 100K
R4 10K
C5 100n 16V
C6 10u 16V
C7 10u 16V
R6 10K
R8 100K
C8 10u 16V
+5VA
C9 10u 16V
C10 47u 16V
C11 22u 16V
C12 100n 16V
IC6 S-1206B33 U3T1
IN
OUT
GND
C13 100n 16V
C14 10u 16V
MP2
MP3