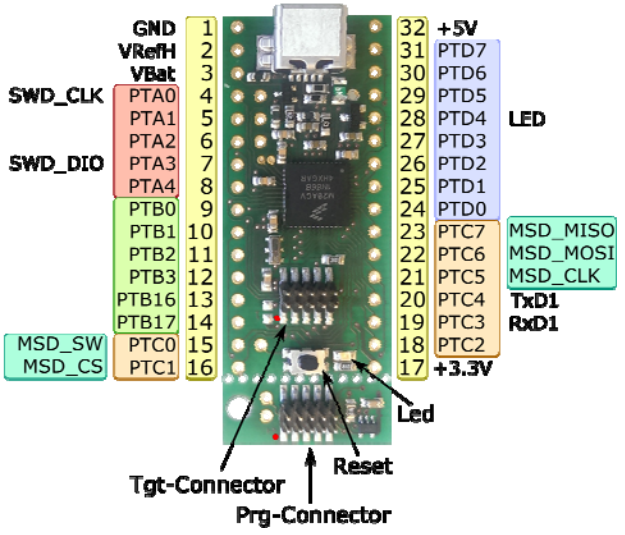
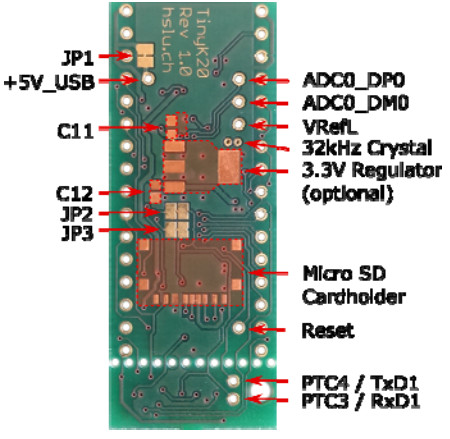
TinyK20, Rev 1.0

Lucerne University of
Applied Sciences and Arts

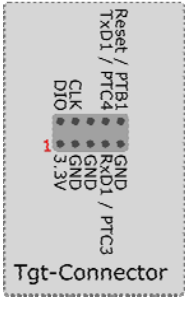
HOCHSCHULE
LUZERN

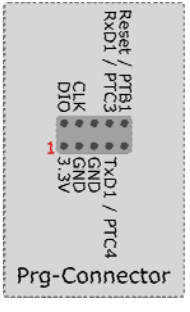
Technik & Architektur
CC Electronics

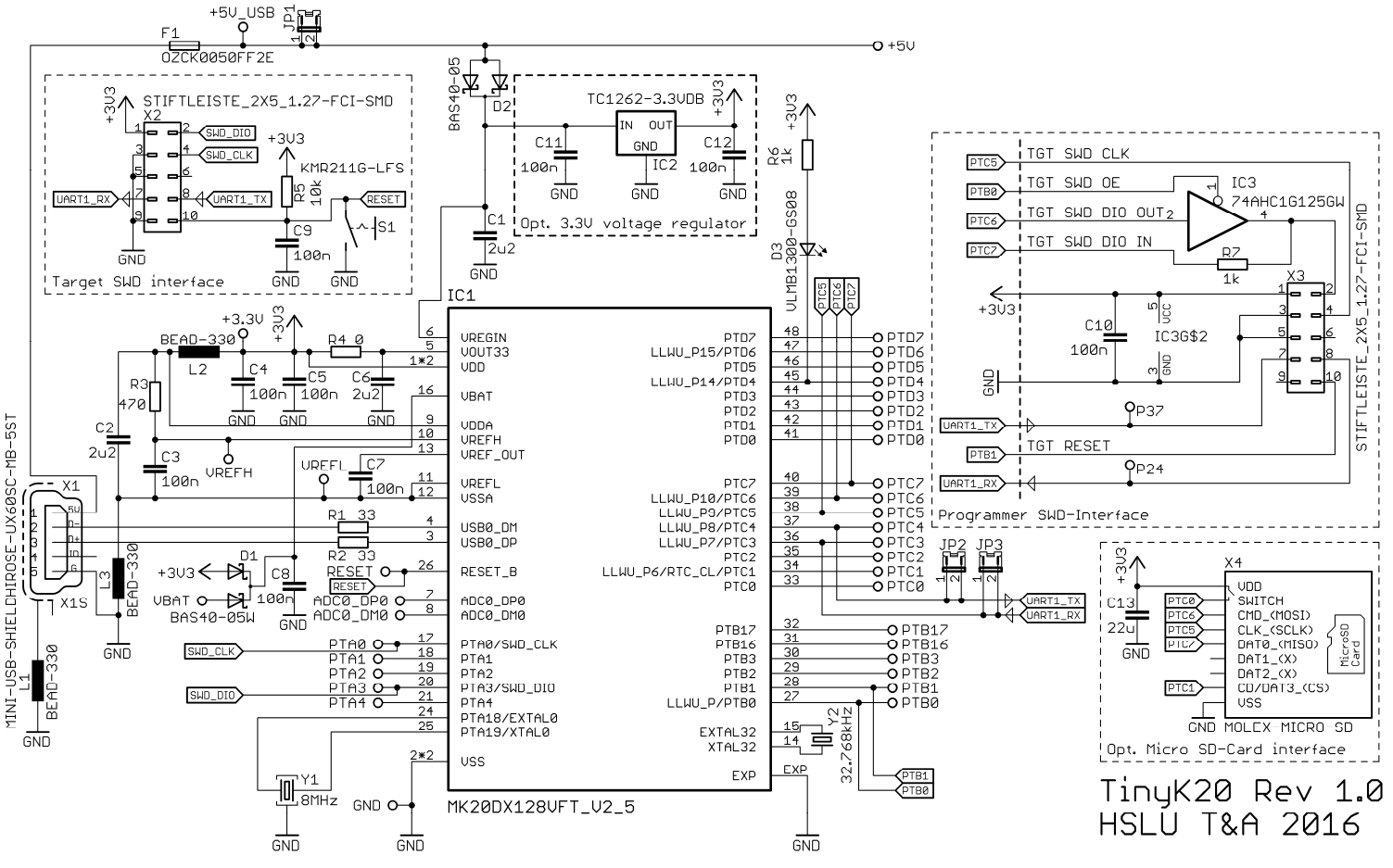




	PTA0	PTA1	PTA2	PTA3	PTA4	PTB0	PTB1	PTB2	PTB3	PTB16	PTB17	PTC0	PTC1	PTC2	PTC3	PTC4	PTC5	PTC6	PTC7	PTD0	PTD1	PTD2	PTD3	PTD4	PTD5	PTD6	PTD7
UART0		R	T							R	T															R	T
UART1															R	T											
UART2																						R	T				
FTM0	5	6	7	0	1								0	1	2	3								4	5	6	7
FTM1						0	1																				
I2C0						C	D	C	D																		
SPI0																	C	O	I		C	O	I				
ADC0						8	9	12	13	14	15	4b									5b				6b	7b	
CMP0																	O	I0	I1								
CMP1														I0	I1	O											
TSI	1	2	3	4	5	0	6	7	8	9	10	13	14	15													






+5V_USB
F1
OZCK0050FF2E
JP1
+5V
BAS40-05
D2
TC1262-3.3VDB
IN
OUT
GND
IC2
C11
100n
C12
100n
C1
2u2
Opt. 3.3V voltage regulator
+3V3
STIFTLEISTE_2X5_1.27-FCI-SMD
X2
SWD_DIO
SWD_CLK
UART1_RX
UART1_TX
RESET
KMR211G-LFS
R5
10k
C9
100n
S1
Target SWD interface
R6
1k
D3
VLMB1300-GS08
IC1
MK20DX128VFT_V2_5
VREGIN
VOUT33
VDD
VBAT
VDDA
VREFH
VREF_OUT
VREFL
VSSA
USB0_DM
USB0_DP
RESET_B
ADC0_DP0
ADC0_DM0
PTA0/SWD_CLK
PTA1
PTA2
PTA3/SWD_DIO
PTA4
PTA18/EXTAL0
PTA19/XTAL0
VSS
PTD7
PTD6
PTD5
PTD4
PTD3
PTD2
PTD1
PTD0
PTC7
PTC6
PTC5
PTC4
PTC3
PTC2
PTC1
PTC0
PTB17
PTB16
PTB3
PTB2
PTB1
PTB0
LLWU_P15/PTD6
LLWU_P14/PTD4
LLWU_P10/PTC6
LLWU_P9/PTC5
LLWU_P8/PTC4
LLWU_P7/PTC3
LLWU_P6/RTC_CL/PTC1
LLWU_P/PTB0
EXTAL32
XTAL32
EXP
Y2
32.768kHz
Y1
8MHz
BEAD-330
L2
R4 0
C4
100n
C5
100n
C6
2u2
R3
470
C2
2u2
C3
100n
C7
100n
R1 33
R2 33
D1
BAS40-05W
C8
100n
L3
BEAD-330
L1
BEAD-330
X1
X1S
MINI-USB-SHIELDHIROSE-UX60SC-MB-5ST
GND
Programmer SWD-Interface
TGT SWD CLK
TGT SWD OE
TGT SWD DIO OUT
TGT SWD DIO IN
TGT RESET
IC3
74AHC1G125GW
R7
1k
X3
C10
100n
IC3G$2
P37
P24
STIFTLEISTE_2X5_1.27-FCI-SMD
JP2
JP3
Opt. Micro SD-Card interface
X4
C13
22u
SWITCH
CMD_(MOSI)
CLK_(SCLK)
DAT0_(MISO)
DAT1_(X)
DAT2_(X)
CD/DAT3_(CS)
VSS
MicroSD Card
GND MOLEX MICRO SD
TinyK20 Rev 1.0
HSLU T&A 2016