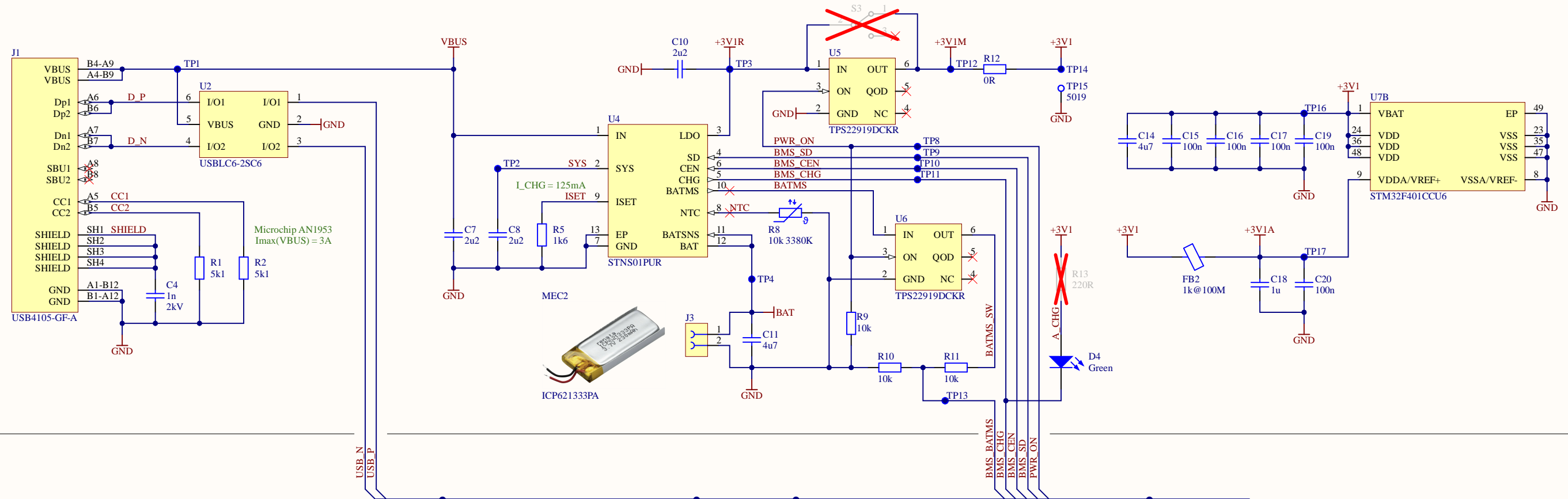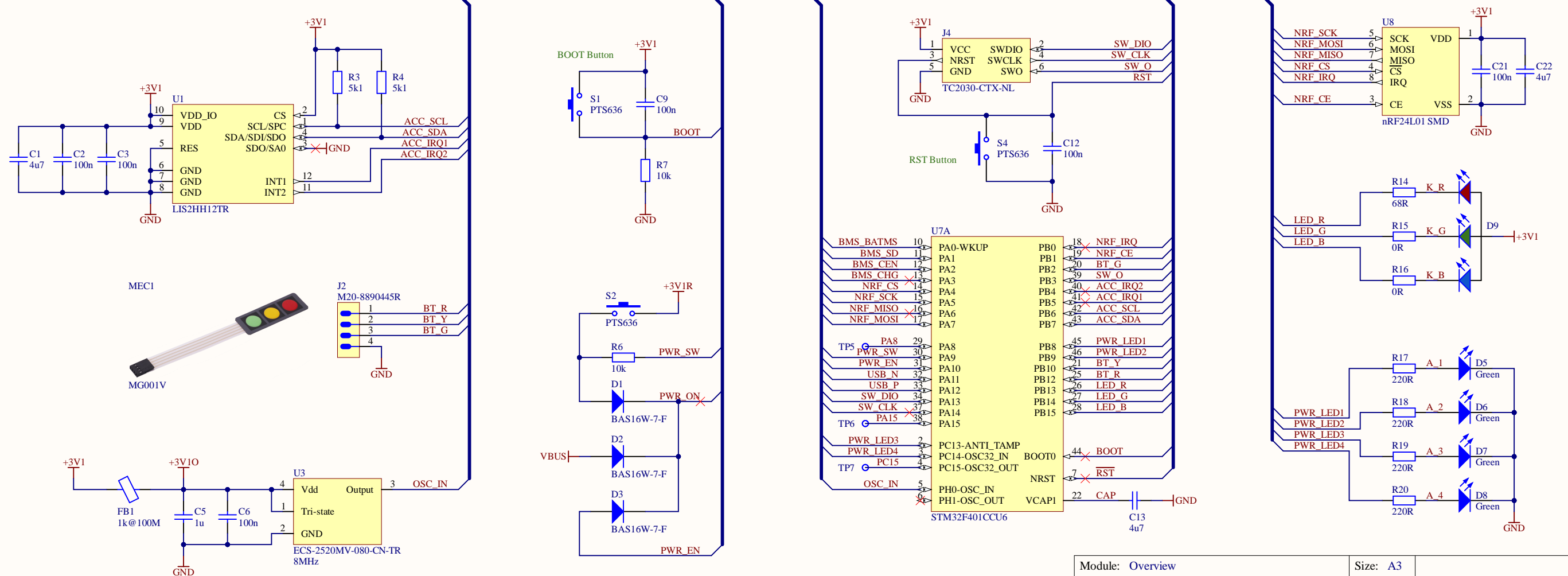# POWER

MCU

Module: Overview — Size: A3
Project: Wireless ScoreBoard — Sub-Project: Remote
Sheet: 1 / 1 — Author: Joel Schaller
Revision: 1.0 — Date: 06.03.2024
File: Overview.SchDoc

ETH zürich

Fitted	Designator	Comment	Value	Description	Manufacturer	Manufacturer Part Number	Supplier	Supplier Part Number	Quantity
Fitted	C1, C11, C13, C14, C22	C0805	4u7	CERCAP 4u7 25V 10% X7R 0805	YAGEO	CC0805KKX7R8BB475	Digi-Key	311-1885-1-ND	5
Fitted	C2, C3, C6, C9, C12, C15, C16, C17, C19, C20, C21	C0402	100n	CERCAP 100n 50V 10% X7R 0402	YAGEO	CC0402KRX7R9BB104	Digi-Key	311-3566-1-ND	11
Fitted	C4	C1206	1n	CERCAP 1n 2kV 10% X7R 1206	Würth Elektronik	885342208024	Digi-Key	732-885342208024CT-ND	1
Fitted	C5, C18	C0805	1u	CERCAP 1u 25V 10% X7R 0805	YAGEO	CC0805KKX7R8BB105	Digi-Key	311-1456-1-ND	2
Fitted	C7, C8, C10	C0805	2u2	CERCAP 2u2 25V 10% X7R 0805	YAGEO	CC0805KKX7R8BB225	Digi-Key	311-1884-1-ND	3
Fitted	D1, D2, D3	BAS16W-7-F		DIODE 200mW 75V 300mA SOT-323	Diodes Incorporated	BAS16W-7-F	Digi-Key	BAS16W-FDICT-ND	3
Fitted	D4, D5, D6, D7, D8	APHHS1005LZGCK-V	Green	LED GREEN 2mA 2.65V 0402	Kingbright	APHHS1005LZGCK-V	DigiKey	754-2126-1-ND	5
Fitted	D9	APHF1608SEEQBDZGKC		LED RGB 20mA 3.3V 1.6x0.8mm	Kingbright	APHF1608SEEQBDZGKC	Digi-Key	754-2144-1-ND	1
Fitted	FB1, FB2	BLM15BD102SN1D	1k@100M	FERRITE 200mA-1k 0402	Murata Electronics	BLM15BD102SN1D	Digi-Key	490-1010-1-ND	2
Fitted	J1	USB4105-GF-A		CONN Female USB-C 16x Horizontal SMD	GCT	USB4105-GF-A	Digi-Key	2073-USB4105-GF-ACT-ND	1
Fitted	J2	M20-8890445R		CONN Male 4-Poles 2.54mm Horizontal SMD	Harwin Inc.	M20-8890445R	Digi-Key	952-M20-8890445RCT-ND	1
Fitted	MEC1	MG001V		EMECH TRIPLE MEMBRANE KEYS	JESSINIE	MG001V	AliExpress	MG001V / 3 Key RYG	1
Fitted	MEC2	ICP621333PA		EMECH SINGLE BATTERY LIPO	Renata	ICP621333PA	Conrad	252027 - UP	1
Fitted	R1, R2, R3, R4	R0402	5k1	RES 5k1 62.5mW 1% 0402	YAGEO	RC0402FR-075K1L	Digi-Key	311-5.10KLRCT-ND	4
Fitted	R5	R0402	1k6	RES 1k6 62.5mW 1% 0402	YAGEO	RC0402FR-071K6L	Digi-Key	YAG3045CT-ND	1
Fitted	R6, R7, R9, R10, R11	R0402	10k	RES 10k 62.5mW 1% 0402	YAGEO	RC0402FR-0710KL	Digi-Key	311-10.0KLRCT-ND	5
Fitted	R8	NCU15XH103F6SRC	10k 3380K	RES NTC 10k 3380K	Murata Electronics	NCU15XH103F6SRC	Digi-Key	490-NCU15XH103F6SRCCT-ND	1
Fitted	R12, R15, R16	R0603	0R	RES 0R 0603	YAEGO	RC0603FR-070RL	Digi-Key	311-0.0HRCT-ND	3
Not Fitted	R13	R0402	220R	RES 220R 62.5mW 1% 0402	YAGEO	RC0402FR-07220RL	Digi-Key	311-220LRCT-ND	0
Fitted	R14	R0603	68R	RES 68R 0603	YAEGO	RC0603FR-0768RL	Digi-Key	311-68.0HRCT-ND	1
Fitted	R17, R18, R19, R20	R0402	220R	RES 220R 62.5mW 1% 0402	YAGEO	RC0402FR-07220RL	Digi-Key	311-220LRCT-ND	4
Fitted	S1, S2, S4	PTS636		BUTTON SPST 12V 50mA 6x3.5x4.3mm	C&K	PTS636 SK43 SMTR LFS	Digi-Key	CKN12311-1-ND	3
Not Fitted	S3	OS102011MS2QN1		SWITCH SPDT 12V 0.1A 4.3x8.6mm	C&K	OS102011MS2QN1	Digi-Key	CKN9565-ND	0
Fitted	TP15	5019		TP SMD 3.81x 2.03mm	Keystone Electronics	5019	Digi-Key	36-5019CT-ND	1
Fitted	U1	LIS2HH12TR		SENSOR accelerometer 1.7-3.6V LGA-12	STMicroelectronics	LIS2HH12TR	Digi-Key	497-15069-1-ND	1
Fitted	U2	USBLC6-2SC6		IC Dual ESD Protection SOT23-6	STMicroelectronics	USBLC6-2SC6	Digi-Key	497-5235-1-ND	1
Fitted	U3	ECS-2520MV-080-CN-TR	8MHz	OSC 8MHz Enable/Disable 1.6V-3.6V 4-SMD 2.5x2mm	ECS Inc.	ECS-2520MV-080-CN-TR	Digi-Key	XC3029CT-ND	1
Fitted	U4	STNS01PUR		Charger Single LiIon 5.4V 12-DFN	STMicroelectronics	STNS01PUR	Digi-Key	497-13880-1-ND	1
Fitted	U5, U6	TPS22919DCKR		POWER-DISTRIBUTION Single Switch 5.5V SOT363	Texas Instruments	TPS22919DCKR	Digi-Key	296-TPS22919DCKRCT-ND	2
Fitted	U7	STM32F401CCU6		MCU ARM-Cortex-M4 256kB_FLASH 64kB_RAM 1.7-3.6V UFQFPN48	STMicroelectronics	STM32F401CCU6	Digi-Key	497-17426-ND	1
Fitted	U8	nRF24L01 SMD		RF Module SPI	Nordic Semiconductor ASA	nRF24L01 SMD	AliExpress	nRF24L01 SMD	1