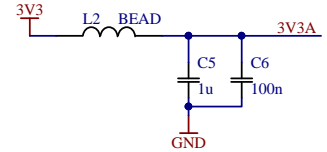
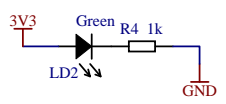
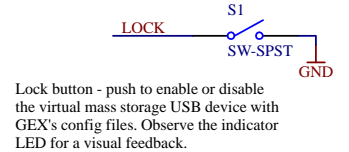


Debug / programming port. Included only for completeness and for debugging in case there's a problem with the DFU bootloader.

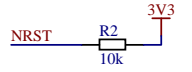
Boot jumper - remove to boot into the DFU bootloader for a firmware update. The jumper is placed in the bottom branch so that it may normally stay attached to the board and doesn't get lost. The cross current is negligible at about 30 uA.



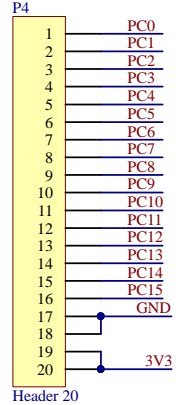
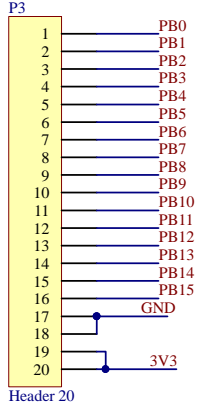
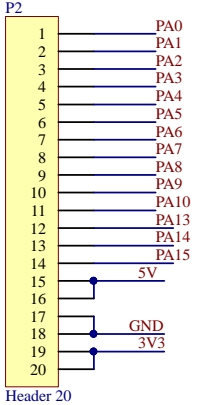
PA0	14	PA0	PC0	8	PC0
PA1	15	PA1	PC1	9	PC1
PA2	16	PA2	PC2	10	PC2
PA3	17	PA3	PC3	11	PC3
PA4	20	PA4	PC4	24	PC4
PA5	21	PA5	PC5	25	PC5
PA6	22	PA6	PC6	37	PC6
PA7	23	PA7	PC7	38	PC7
PA8	41	PA8	PC8	39	PC8
PA9	42	PA9	PC9	40	PC9
PA10	43	PA10	PC10	51	PC10
DM	44	PA11/D-	PC11	52	PC11
DP	45	PA12/D+	PC12	53	PC12
SWDIO	PA13	46	PA13/SWDIO	2	PC13
SWCLK	PA14	49	PA14/SWCLK	3	PC14
LED	PA15	50	PA15	4	PC15



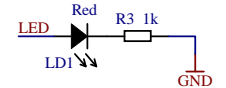
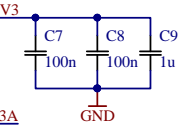
Lock button - push to enable or disable the virtual mass storage USB device with GEX's config files. Observe the indicator LED for a visual feedback.



Reset - a resistor is used to allow pulling the pin low by a debugger, otherwise it stays at 3.3 V. Hard reset is not needed very often and a dedicated button is therefore unnecessary; the device can be re-plugged to the USB port should the need arise.



PB0	26	PB0	PD2	54	LOCK
PB1	27	PB1	VBAT	1	3V3
PB2	28	PB2	VDD_1	48	
PB3	55	PB3	VDD_2	32	
PB4	56	PB4	VDD_3	19	
PB5	57	PB5	VDD_4	64	
PB6	58	PB6	VDD_A	13	3V3A
PB7	59	PB7	VSS_1	47	
PB8	61	PB8	VSS_2	31	
PB9	62	PB9	VSS_3	18	
PB10	29	PB10	VSS_4	63	
PB11	30	PB11	VSS_A	12	
PB12	33	PB12	PF0/OSC_IN	5	OSC_IN
PB13	34	PB13	PF1/OSC_OUT	6	OSC_OUT
PB14	35	PB14	NRST	7	NRST
PB15	36	PB15	BOOT0	60	BOOT0



Indicator LED - "start-up chime", periodic flash to indicate correct operation, file upload indication etc. Solid light = fault (will extinguish after a couple seconds due to WD

3V3 and 5V are not adjacent to prevent a short during manipulation bringing Vdd to the Vbus level. A short to GND will trip overcurrent protection in the USB hub or the regulator. PA15 and PA14 are 5V tolerant.

Title		
GEX Hub		
Size	Number	Revision
A4		1
Date:	19. 5. 2018	Sheet of
File:	D:\GEX\GEX_IDC\GEX_IDC.r1.SchDoc	Drawn By: MightyPork