

D1 will also cause a RESET when the ISP button is pressed.

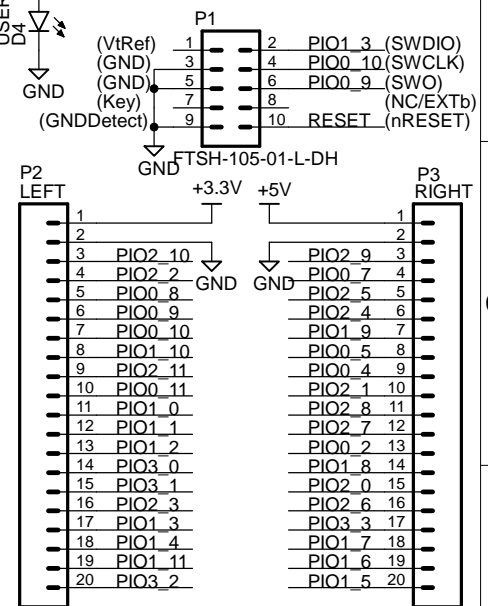
R3/R5 will cause the bootloader to boot into USB/MSC mode if USB is connected, and into UART/ISP mode otherwise.

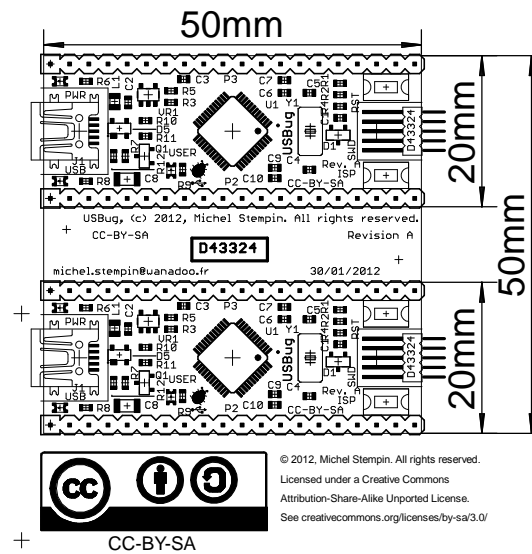
PIO0_4 and PIO0_5 can sink up to 20 mA.

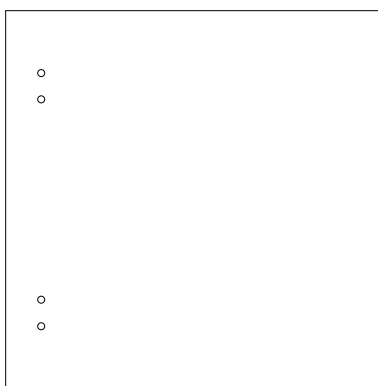
PIO0_7 can output up to 20 mA and sink 4 mA.

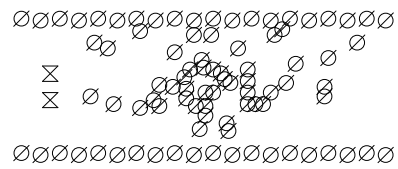
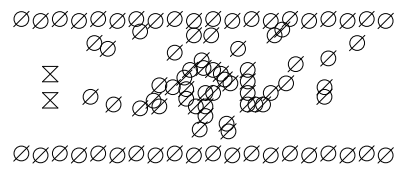
Other I/O pins can sink and source up to 4 mA only.

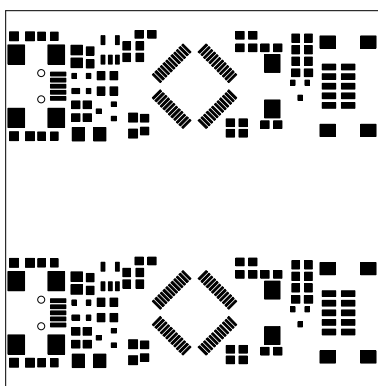
RESET/PIO0_0	3	RESET
PIO0_1/CLKOUT/CT32B0_MAT2/USB_FTGGLE	4	ISP
PIO0_2/SSEL/CT16B0_CAP0	10	PIO0_2
PIO0_3/USB_VBUS	14	USB_VBUS
PIO0_4/SCL	15	PIO0_4
PIO0_5/SDA	16	PIO0_5
PIO0_6/USB_CONNECT/SCK	22	USB_CONNECT
PIO0_7/CTS	23	PIO0_7
PIO0_8/MISO/CT16B0_MAT0	27	PIO0_8
PIO0_9/MOSI/CT16B0_MAT1/SWO	28	PIO0_9
SWCLK/PIO0_10/SCK/CT16B0_MAT2	29	PIO0_10
TDI/PIO0_11/AD0/CT32B0_MAT3	32	PIO0_11
TMS/PIO1_0/AD1/CT32B1_CAP0	33	PIO1_0
TDO/PIO1_1/AD2/CT32B1_MAT0	34	PIO1_1
TRST/PIO1_2/AD3/CT32B1_MAT1	35	PIO1_2
SWDIO/PIO1_3/AD4/CT32B1_MAT2	39	PIO1_3
PIO1_4/AD5/CT32B1_MAT3/WAKEUP	40	PIO1_4
PIO1_5/RTS/CT32B0_CAP0	45	PIO1_5
PIO1_6/RXD/CT32B0_MAT0	46	PIO1_6
PIO1_7/TXD/CT32B0_MAT1	47	PIO1_7
PIO1_8/CT16B1_CAP0	9	PIO1_8
PIO1_9/CT16B1_MAT0	17	PIO1_9
PIO1_10/AD6/CT16B1_MAT1	30	PIO1_10
PIO1_11/AD7	42	PIO1_11
PIO2_0/DTR	2	PIO2_0
PIO2_1/DSR	13	PIO2_1
PIO2_2/DCD	26	PIO2_2
PIO2_3/RI	38	PIO2_3
PIO2_4	18	PIO2_4
PIO2_5	21	PIO2_5
PIO2_6	1	PIO2_6
PIO2_7	11	PIO2_7
PIO2_8	12	PIO2_8
PIO2_9	24	PIO2_9
PIO2_10	25	PIO2_10
PIO2_11/SCK	31	PIO2_11
PIO3_0	36	PIO3_0
PIO3_1	37	PIO3_1
PIO3_2	43	PIO3_2
PIO3_3	48	PIO3_3

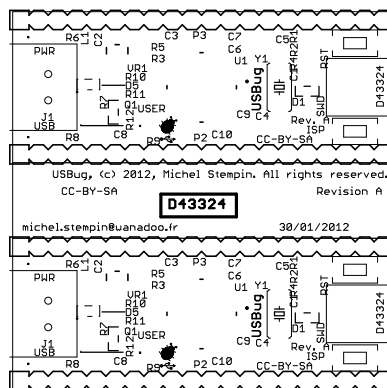


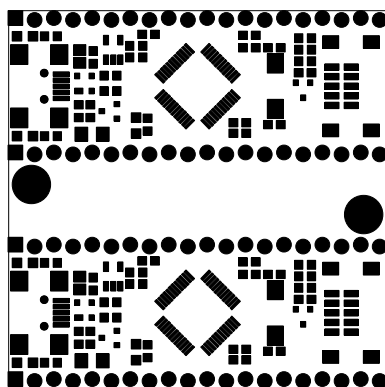


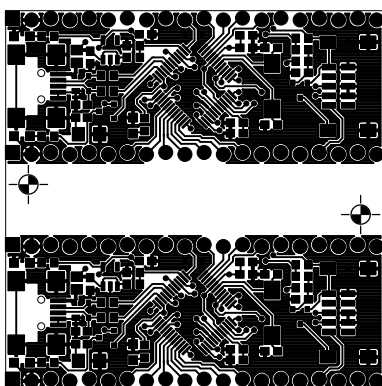


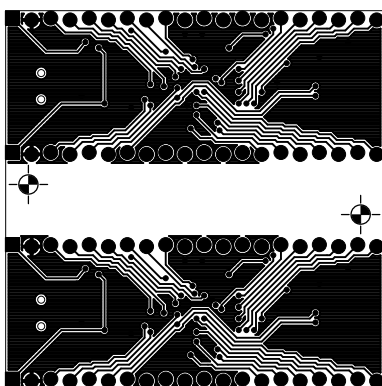


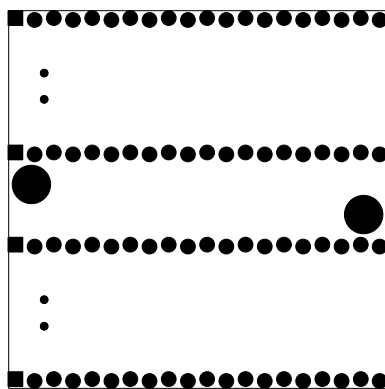




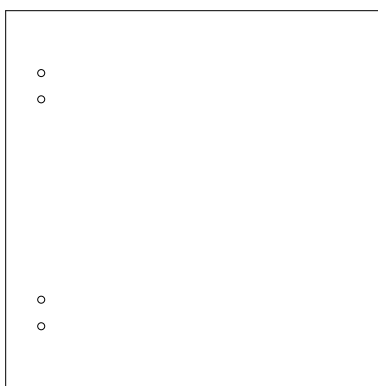








[illegible]



USBug

Qty	Value	Device	Parts	Supplier	Supplier Part Number	Supplier Part Number	Manufacturer	Manufacturer Part Number	Description	Price/1	Price/50	Price/100	Price/250	Price/500	Price/1000	Total/1
3	100n	CAP_0603	C1, C6, C9	DigiKey	478-1239-1-ND	478-1239-6-ND	AVX Corporation	0603YC104KAT2A	CAP CER 0.1UF 16V 10% X7R 0603	\$0,10000		\$0,00940	\$0,00764	\$0,00654	\$0,00500	\$0,30000
1	1u/16V	CAP_0603	C2	DigiKey	587-1241-1-ND	587-1241-6-ND	Taiyo Yuden	EMK107B7105KA-T	CAP CER 1UF 16V 10% X7R 0603	\$0,20000	\$0,06000	\$0,04500	\$0,03252	\$0,02400	\$0,01625	\$0,20000
1	2u2/10V	CAP_0603	C3	DigiKey	587-2983-1-ND	587-2983-6-ND	Taiyo Yuden	LMK107B7225KA-T	CAP CER 2.2UF 10V 10% X7R 0603	\$0,32000	\$0,14000	\$0,11200	\$0,08000	\$0,05440	\$0,04400	\$0,32000
2	18p	CAP_0603	C4, C5	DigiKey	445-1272-1-ND	445-1272-6-ND	TDK Corporation	C1608COG1H180J	CAP CER 18PF 50V 5% NPO 0603	\$0,30000		\$0,01380	\$0,01124	\$0,00962	\$0,00750	\$0,60000
2	10n	CAP_0603	C7, C10	DigiKey	445-6855-1-ND	445-6855-6-ND	TDK Corporation	C1608X7R1C103K	CAP CER 10000PF 16V 10% X7R 0603	\$0,24000		\$0,01100	\$0,00900	\$0,00770	\$0,00600	\$0,48000
1	10n/500V	CAP_1206	C8	DigiKey	709-1027-1-ND	709-1027-6-ND	Johanson Dielectrics Inc	501R18W103KV4E	CAP CER 10000PF 500V X7R 1206	\$0,32000		\$0,11270	\$0,08052	\$0,05474	\$0,04428	\$0,32000
1	BAT54C	BAT54C	D1	DigiKey	BAT54C-FDICT-ND	BAT54C-FDIDKR-ND	Diodes Inc	BAT54C-7-F	DIODE SCHOTTKY DUAL 30V SOT23-3	\$0,20000		\$0,12050	\$0,07100	\$0,05890	\$0,04017	\$0,20000
1	POWER	LED_0805	D2	DigiKey	350-2038-1-ND	350-2038-1-ND	Dialight	598-8110-107F	LED ALINGAP RED CLEAR 0805 SMD	\$0,39000		\$0,16430	\$0,11624	\$0,09920	\$0,07750	\$0,39000
1	USB	LED_0805	D3	DigiKey	350-2032-1-ND	350-2032-1-ND	Dialight	598-8140-107F	LED ALINGAP YLW CLEAR 0805 SMD	\$0,46000		\$0,19610	\$0,13876	\$0,11840	\$0,09250	\$0,46000
1	USER	LED_0805	D4	DigiKey	350-2035-1-ND	350-2035-1-ND	Dialight	598-8170-107F	LED ALINGAP GREEN CLEAR 0805 SMD	\$0,41000		\$0,17490	\$0,12376	\$0,10560	\$0,08250	\$0,41000
1	PRTR5V0U2X	PRTR5V0U2X	D5	DigiKey	568-4140-1-ND	568-4140-6-ND	NXP Semiconductors	PRTR5V0U2X,215	DIODE ESD PROTECTION SOT143B	\$0,57000		\$0,35780	\$0,31036	\$0,26286	\$0,20265	\$0,57000
1	MINI-B USB	MINI-B_USBX60-MB-5ST	J1	DigiKey	H2959CT-ND	H2959DKR-ND	Hirose Electric Co Ltd	UX60-MB-5ST	CONN RECEPT MINI USB2.0 5POS	\$1,25000	\$0,82500	\$0,74250	\$0,62700	\$0,52800	\$0,52800	\$1,25000
1	BLM18EG6015N1D	FERRITE_BEAD0603	L1	DigiKey	490-3994-1-ND	490-3994-6-ND	Murata Electronics North America	BLM18EG6015N1D	FILTER CHIP 600 OHM 500MA 0603	\$0,38000	\$0,21840	\$0,18200	\$0,13652	\$0,11648	\$0,09100	\$0,38000
1	FTSH-105-01-L-DH	FTSH-105-01-L-DH	P1	DigiKey	SAM1160-05-ND	SAM1160-05-ND	Samtec Inc	FTSH-105-01-L-DH	CONN HEADR 10POS DL .05" R/A SMD	\$3,84000		\$2,81600		\$2,24000	\$1,82400	\$3,84000
1	LEFT	HEADER_1X20_LOCK	P2	DigiKey	WM6420-ND	WM6420-ND	Molex Connector Corporation	22-28-4200	CONN HEADER 20POS .100 VERT TIN	\$0,64000		\$0,47160		\$0,37276	\$0,32000	\$0,64000
1	RIGHT	HEADER_1X20_LOCK	P3	DigiKey	WM6420-ND	WM6420-ND	Molex Connector Corporation	22-28-4200	CONN HEADER 20POS .100 VERT TIN	\$0,64000		\$0,47160		\$0,37276	\$0,32000	\$0,64000
1	B5S84-7-F	B5S84-7-F	Q1	DigiKey	B5S84-FDICT-ND	B5S84-FDIDKR-ND	Diodes Inc	B5S84-7-F	MOSFET P-CH 50V 130MA SOT23-3	\$0,39000		\$0,16380	\$0,11580	\$0,09270	\$0,07110	\$0,39000
2	20K	RES_0603	R1, R2	DigiKey	P20KGCT-ND	P20KGDKR-ND	Panasonic - ECG	ERJ-3GEY1203V	RES 20K OHM 1/10W 5% 0603 SMD	\$0,10000	\$0,00920	\$0,00700	\$0,00520	\$0,00384	\$0,00256	\$0,20000
2	33R	RES_0603	R10, R11	DigiKey	P33GCT-ND	P33GDKR-ND	Panasonic - ECG	ERJ-3GEY1330V	RES 33 OHM 1/10W 5% 0603 SMD	\$0,10000	\$0,00920	\$0,00700	\$0,00520	\$0,00384	\$0,00256	\$0,20000
1	1M	RES_0603	R12	DigiKey	P1.0MGCT-ND	P1.0MGDKR-ND	Panasonic - ECG	ERJ-3GEY1105V	RES 1.0M OHM 1/10W 5% 0603 SMD	\$0,10000	\$0,00920	\$0,00700	\$0,00520	\$0,00384	\$0,00256	\$0,10000
1	10k	RES_0603	R3	DigiKey	P10KGCT-ND	P10KGDKR-ND	Panasonic - ECG	ERJ-3GEY1103V	RES 10K OHM 1/10W 5% 0603 SMD	\$0,10000	\$0,00920	\$0,00700	\$0,00520	\$0,00384	\$0,00256	\$0,10000
2	1k	RES_0603	R4, R9	DigiKey	P1.0KGCT-ND	P1.0KGDKR-ND	Panasonic - ECG	ERJ-3GEY1102V	RES 1.0K OHM 1/10W 5% 0603 SMD	\$0,10000	\$0,00920	\$0,00700	\$0,00520	\$0,00384	\$0,00256	\$0,20000
1	100k	RES_0603	R5	DigiKey	P100KGCT-ND	P100KGDKR-ND	Panasonic - ECG	ERJ-3GEY1104V	RES 100K OHM 1/10W 5% 0603 SMD	\$0,10000	\$0,00920	\$0,00700	\$0,00520	\$0,00384	\$0,00256	\$0,10000
2	150R	RES_0603	R6, R8	DigiKey	P150GCT-ND	P150GDKR-ND	Panasonic - ECG	ERJ-3GEY1151V	RES 150 OHM 1/10W 5% 0603 SMD	\$0,10000	\$0,00920	\$0,00700	\$0,00520	\$0,00384	\$0,00256	\$0,20000
1	1k5	RES_0603	R7	DigiKey	P1.5KGCT-ND	P1.5KGDKR-ND	Panasonic - ECG	ERJ-3GEY1152V	RES 1.5K OHM 1/10W 5% 0603 SMD	\$0,10000	\$0,00920	\$0,00700	\$0,00520	\$0,00384	\$0,00256	\$0,10000
1	RESET	SPST_SWITCH	S1	DigiKey	679-2307-1-ND	679-2307-6-ND	APEM Components, LLC	ADTSM32RVTR	SWITCH TACTILE SPST-NO 0.05A 12V	\$0,86000	\$0,00920	\$0,00700	\$0,00520	\$0,00384	\$0,00256	\$0,86000
1	ISP	SPST_SWITCH	S2	DigiKey	679-2307-1-ND	679-2307-6-ND	APEM Components, LLC	ADTSM32RVTR	SWITCH TACTILE SPST-NO 0.05A 12V	\$0,86000	\$0,70100	\$0,61990	\$0,56596	\$0,53900	\$0,53900	\$0,86000
1	LPC1343FBD48	LPC1343FBD48	U1	DigiKey	568-4945-ND	568-4945-ND	NXP Semiconductors	LPC1343FBD48,151	IC MCU 32BIT 32KB FLASH 48LOFP	\$4,51000		\$3,30050	\$2,97852	\$2,67260	\$2,25400	\$4,51000
1	MIC5225-3.3YM5	MIC5225-3.3YM5	VR1	DigiKey	576-2980-1-ND	576-2980-6-ND	Micrel Inc	MIC5225-3.3YM5 TR	IC REG 3.3V SOT23-5	\$0,75000		\$0,50000	\$0,37500	\$0,35000	\$0,35000	\$0,75000
1	12MHz	CRYSTAL_50X32	Y1	DigiKey	644-1034-1-ND	644-1034-6-ND	NDK	NX5032GA-12.000000MHZ-LN-CD-1	CRYSTAL 12.000000 MHZ 8PF SMD	\$0,81000	\$0,61560	\$0,48600		\$0,41040	\$0,41040	\$0,81000
TOTAL																\$19,88000