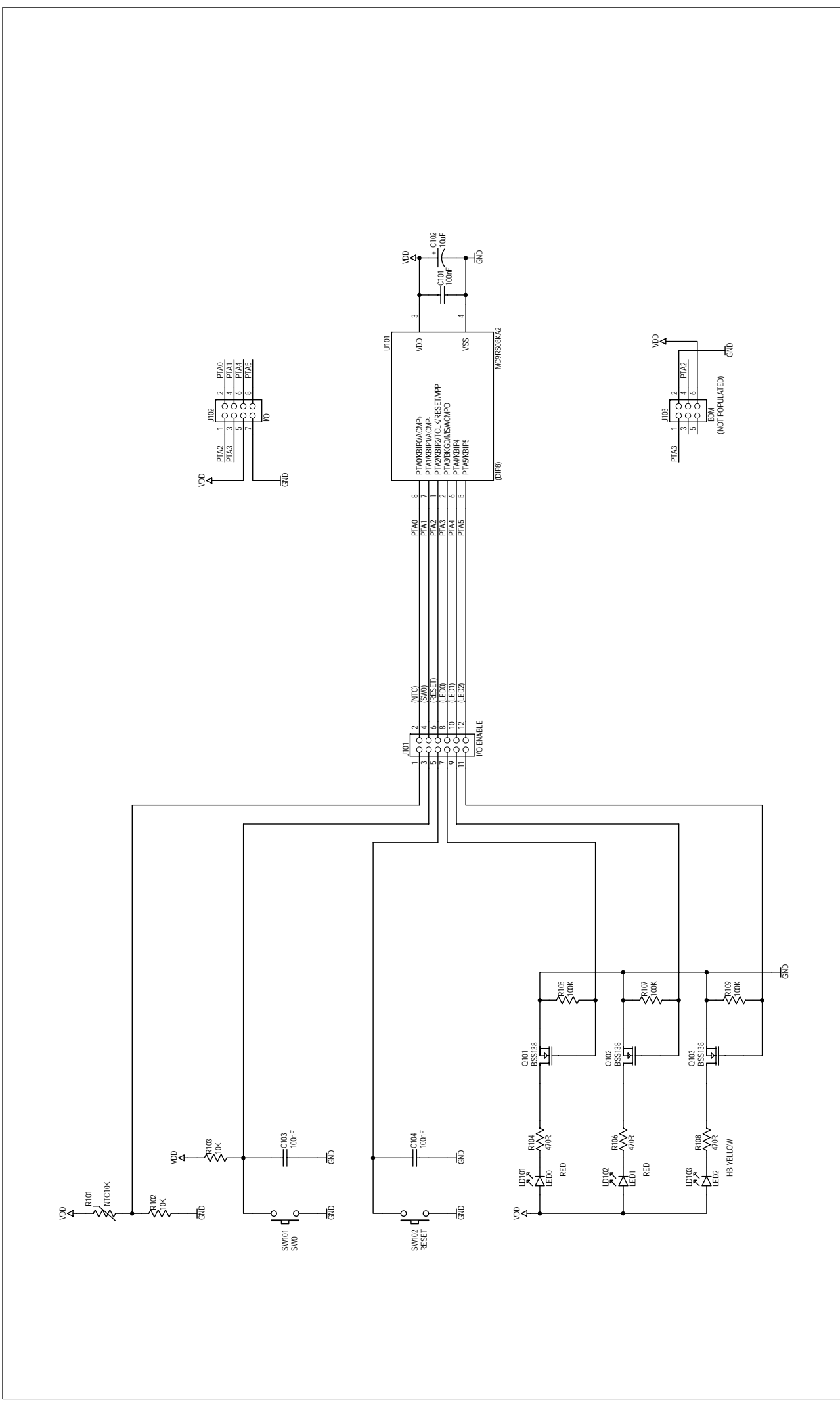
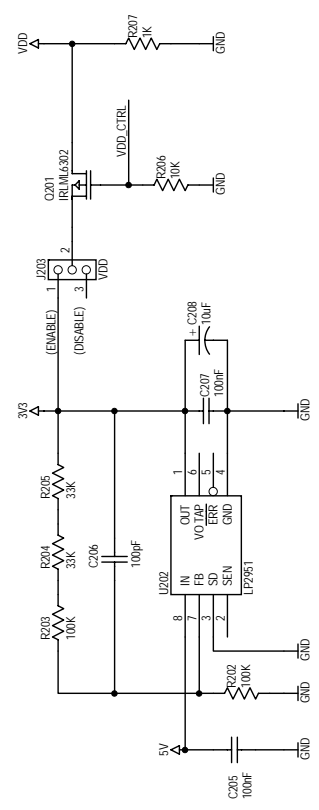
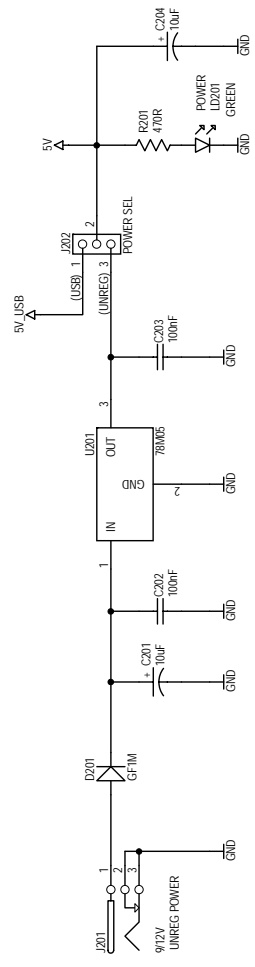
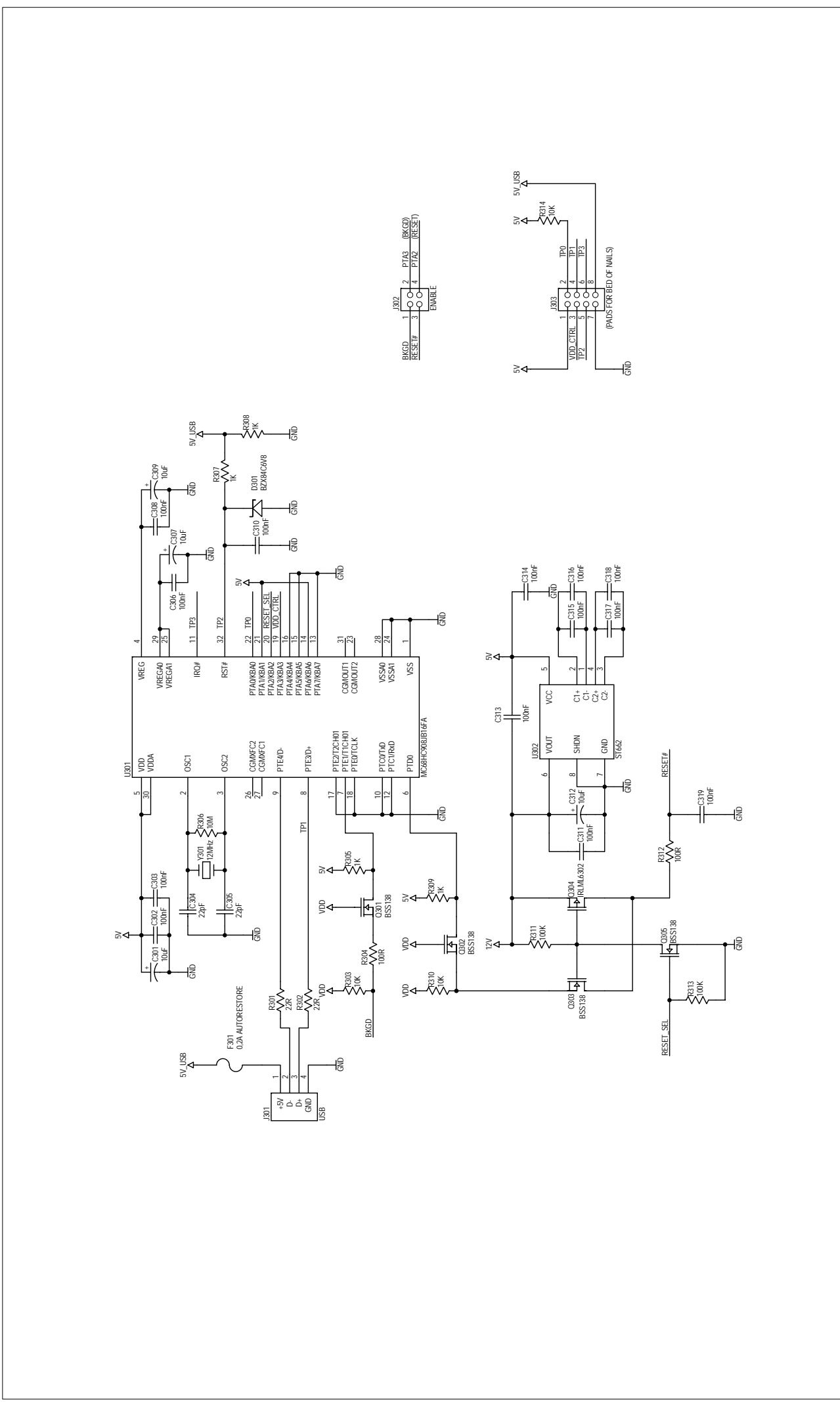


# **DEMO9RS08KA2**

## **Schematic and Bill of Material**







## DEMO9RS08KA2 Bill of Material

Qty	Description	Ref. Designators	Vendor Part#
<b>Capacitors</b>			
20	Ceramic Capacitor 100nF X7R 50V 0805	C101, C103, C104, C202, C203, C205, C207, C302, C303, C306, C308, C310, C311, C313, C314, C315, C316, C317, C318, C319	Walsin, 0805B104K500CT
1	Ceramic Capacitor 100pF X7R 50V 0805	C206	Walsin, 0805B101K500CT
2	Ceramic Capacitor 22pF NP0 50V 0805	C304, C305	Walsin, 0805N220K500CT
8	Tantalum Capacitor 10uF 16V size B	C102, C201, C204, C208, C301, C307, C309, C312	NIC Components, NTC-T106M16TRBF
<b>Connectors</b>			
1	DC Power Connector 2.1 mm male 90° SMD	J201	Switchcraft, RASM722PX
1	Header Connector 2 x 2 pin male gold straight solder h=6mm SMD pitch 2,54mm	J302	Samtec, TSM10201LDVPTR
2	Header Connector 3 x 1 pin male gold straight solder h=6mm SMD pitch 2,54mm	J202, J203	Samtec, TSM10301LSVPTR
1	Header Connector 4 x 2 pin male gold straight solder h=6mm SMD pitch 2,54mm	J102	Samtec, TSM10401LDVPTR
1	Header Connector 6 x 2 pin male gold straight solder h=6mm SMD pitch 2,54mm	J101	Samtec, TSM10601LDVPTR
10	Shunt jumper 2,54mm totally insulated black pitch 2,54mm		Coxoc, 308A02PGBA003
1	USB Connector Receptacle Type B 90° SMD 4-pin	J301	Samtec, USBBSSBSMRTR
<b>Crystals</b>			
1	SMD Crystal 12MHz HC-49USMD (11x5x3)	Y301	Megatec, HC49/USM4-012M000000CR
<b>Diodes</b>			
1	Rectifier Diode GF1M SMA	D201	Fairchild Semiconductor, GF1M
1	Zener Diode BZX84 6.8V 1/4W SOT23	D301	Philips Semiconductors, BZX84-A6V8
<b>Fuses</b>			
1	Autorestore Fuse 0,2A 1812	F301	Raychem Circuit Protection, miniSMDC020-2
<b>Integrated Circuits</b>			
1	IC DC-DC Converter ST662 SOIC8	U302	STMicroelectronics, ST662ACD
1	IC Microcontroller MC68HC908JB16FA LQFP32	U301	Freescale, MC68HC908JB16FA
1	IC Microcontroller MC9RS08KA2 DIP8		Freescale, MC9RS08KA2
1	IC Voltage Regulator LM78M05 5V TO252 (DPAK)	U201	National Semiconductor, LM78M05CDT
1	IC Voltage Regulator LP2951 SOIC8	U202	On Semiconductor, LP2951CD
<b>LEDs</b>			
1	SMD LED Green 1206	LD201	Agilent Technologies, HSMG-C150
2	SMD LED Red 1206	LD101, LD102	Agilent Technologies, HSMH-C150
1	SMD LED Yellow HB 1206	LD103	Lite-on, LTST-C150KSKT
<b>Resistors</b>			
7	SMD Resistor 100K 1% 0805	R105, R107, R109, R202, R203, R311, R313	Kamaya, RMC1/10K1003FTP
2	SMD Resistor 100R 1% 0805	R304, R312	Kamaya, RMC1/10K1000FTP
6	SMD Resistor 10K 1% 0805	R102, R103, R206, R303, R310, R314	Kamaya, RMC1/10K1002FTP
1	SMD Resistor 10M 1% 0805	R306	Kamaya, RMC1/10K1005FTP
5	SMD Resistor 1K 1% 1/8W 0805	R207, R305, R307, R308, R309	Kamaya, RMC1/10K102FTP
2	SMD Resistor 22R 1% 0805	R301, R302	Kamaya, RMC1/10K220FTP
2	SMD Resistor 33K 1% 0805	R204, R205	Kamaya, RMC1/10K3302FTP

Qty	Description	Ref. Designators	Vendor Part#
4	SMD Resistor 470R 1% 0805	R104, R106, R108, R201	Kamaya, RMC1/10K4700FTP
<b>Sockets</b>			
1	IC Socket Tulip SMD DIP8	U101	Mill-Max, 214-44-308-01-670800
<b>Switches</b>			
2	Pushbutton Switch SMD	SW101, SW102	Augat, FSM4JSMA
<b>Thermistors</b>			
1	NTC Thermistors 10K 10% 0805	R101	Siemens, B57620-C103-J62
<b>Transistors</b>			
7	NMOS Transistor BSS138 SOT23	Q101, Q102, Q103, Q301, Q302, Q303, Q305	On Semiconductor, BSS138LT1G
2	PMOS Transistor IRLML6302 SOT23	Q201, Q304	International Rectifier, IRLML6302TRPBF