

Cascade CCS Bill of Materials

Qty	Ref Des	Description	Manufacturer	Mfg PN	Vendor	Vendor PN	Vendor2	Vendor2 PN	Alt Mfg	Alt MPN	Alt Vendor	Alt Vendor PN
2	TP1, TP2	Test point	Keystone	5011	Mouser	534-5011	DigiKey	36-5011-ND	Keystone	5012	DigiKey	36-5012-ND
2	R1, R2	Resistor, 1k 1%, 0805	Vishay	CRCW08051K00FKEA	DigiKey	541-1.00KCCCT-ND	Mouser	71-CRCW0805-1.0K-E3	Panasonic	ERJ-6ENF1001V	Mouser	667-ERJ-6ENF1001V
2	D1, D2	TVS, 12V Low capacitance, SOT23	Semtech	LCDA12C-1.TCT	Mouser	947-LCDA12C-1.TCT	DigiKey	LCDA12C-1CT-ND	Microsemi	USB50412C	Mouser	494-USB50412CE3/TR7
1	HS1	Heatsink, SK145	Fischer	SK 145 37,5 SA TO 220	DigiKey	5496-SK14537,5SATO220-NC	Reichfelt	SK 145/37.5 220A				
0	HS1 (alternate)	Heatsink, HSE-B2111	CUI	HSE-B2111-038	Mouser	490-HSE-B2111-038	DigiKey	102-4226-ND	Fischer	SK 431 1	Reichfelt	SK 431/25/SA 1
1	Q1	Depletion MOSFET, TO220	Ixys	IXTP08N100D2	DigiKey	IXTP08N100D2-ND	Mouser	747-IXTP08N100D2	Ixys	IXTP1R6N100D2	Mouser	747-IXTP1R6N100D2
1	MH3	Nut, 4-40, SMT	Keystone	4881	Mouser	534-4881	DigiKey	36-4881CT-ND	PEM	SMTSO-440-2ET	Mouser	153-SMTSO-440-2ET
2	MH1, MH2	Standoff, 4-40x1/4, SMT	Keystone	4883	Mouser	534-4883	DigiKey	36-4883CT-ND	PEM	SMTSO-440-8ET	Mouser	153-SMTSO-440-8ET
1	At Q1	Thermal Pad TO220	Bergquist	SP400-0.009-00-58	DigiKey	BER216-ND	Mouser	951-SP400-009-00-58	Bergquist	SP400-0.009-00-54	Mouser	951-SP400-009-00-54
1	At Q1	Screw, 4-40x3/8 Spring Washer			McMaster	91241A416	Olander	4C37PPQS				
1	At Q1	Shoulder washer TO220	Boyd Laconia	7721-9PPSG	Mouser	532-7721-9PPS	DigiKey	7721-9PPSG-ND	Boyd Laconia	7721-9PPS	DigiKey	7721-9PPS-ND
1	PCB	PCB				pmillett	CCS4					
2		Screw, 4-40x3/8 Pan type F			Fastner Mart	SC104-0142	McMaster	90087A107				
2		Screw, 4-40x3/8 Flat type F			Fastner Mart	SC184-9122	McMaster	90086A608				
2		Screw, 4-40x1/4 Pan			Fastner Mart	SC164-4832	McMaster	90272A106				
2		Screw, 4-40x1/4 Flat			Fastner Mart	SC194-6722	McMaster	90273A106				
1		Bag 1.5x1.5 poly			Uline	S-10819						
1		Bag 2x3 Antistatic			Uline	S-3700						
JFET (0.1 - 5mA)												
1	Q3	JFET, SOT23	On Semi	CPH3910-TL-E	Mouser	863-CPH3910-TL-E	DigiKey	CPH3910-TL-EOSCT-ND	Linear Integrated Systems	LSK170D SOT-23 3L ROHS	DigiKey	4004-LSK170DSOT-233LROHSCT-ND
1	R3	Resistor, 100R 1% 1/8W, 0805	Vishay	CRCW0805100RFKFA	DigiKey	541-100CCT-ND	Mouser	71-CRCW0805-100-E3	Panasonic	ERJ-P06F1000V	Mouser	667-ERJ-P06F1000V
1	RV1	Trimpot, 0.25", 10k	TT Electronics	64WR10KLF	DigiKey	987-1061-ND	Mouser	858-64WR10KLF	Bourns	3266W-1-103LF	Mouser	652-3266W-1-103LF
Low range (2 - 15mA)												
1	Q2	Depletion MOSFET, SOT223	Infineon	BSP149H6327XTSA1	Mouser	726-BSP149H6327XTSA1	DigiKey	BSP149H6327XTSA1CT-ND	Infineon	BSP129H6327XTSA1	Mouser	726-BSP129H6327XTSA1
1	R3	Resistor, 100R 1% 1/8W, 0805	Vishay	CRCW0805100RFKFA	DigiKey	541-100CCT-ND	Mouser	71-CRCW0805-100-E3	Panasonic	ERJ-P06F1000V	Mouser	667-ERJ-P06F1000V
1	RV1	Trimpot, 0.25", 1k	TT Electronics	64WR1KLF	DigiKey	987-1062-ND	Mouser	858-64WR1KLF	Bourns	3266W-1-102LF	Mouser	652-3266W-1-102LF
High range (5mA - 50mA)												
1	Q2	Depletion MOSFET, SOT223	Infineon	BSP149H6327XTSA1	Mouser	726-BSP149H6327XTSA1	DigiKey	BSP149H6327XTSA1CT-ND	Infineon	BSP129H6327XTSA1	Mouser	726-BSP129H6327XTSA1
1	R3	Resistor, 10R 1% 1/8W, 0805	Vishay	CRCW080510R0FKFA	DigiKey	541-10.0CCT-ND	Mouser	71-CRCW0805-10-E3	Panasonic	ERJ-P06F10R0V	Mouser	667-ERJ-P06F10R0V
1	RV1	Trimpot, 0.25", 200R	TT Electronics	64WR200LF	DigiKey	987-1063-ND	Mouser	858-64WR200LF	Bourns	3266W-1-201LF	Mouser	652-3266W-1-201LF