



Bill of Materials for the NCS32100-GEVK Evaluation Board

Designator (Main Board)	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacture Part Number	Substitution Allowed	Lead Free	Digikey P/N
C12 C13 C14 C15 C16 C18 C19 C20 C21 C22 C30 C303	12	CAP CER 0.1UF 50V X7R 0402	0.1uF		0402	Murata	GCM155R71H104ME02	Y	Y	490-18204-1-ND
C17 C23 C28	3	CAP CER 4.7UF 35V X7S 0805	4.7uF		0805	Murata	GCM21BC7YA475KE36	Y	Y	490-16389-1-ND
C24 C27	2	CAP CER 1UF 10V X7S 0402	1uF		0402	Murata	GCM155C71A105KE38	Y	Y	490-13409-1-ND
C25 C26	2	CAP CER 22UF 10V X5R 0603	2.2uF		0603	Murata	GRM188R61A22ME15	Y	Y	1276-1085-1-ND
C120 C121	2	CAP CER 1UF 16V X5R 0402	1uF		0402	Murata	GRM155R61C105KA12	Y	Y	490-10694-2-ND
C29	1	C1608X7R1C105K080AC	1uF		603	Murata	GRM155R61C105KA12	Y	Y	445-1604-1-ND
C100 C102	2	CAP CER 3300PF 50V COG 0603	3300pF		0603	TDK	C1608C0G1H332J080AA	Y	Y	445-1599-1-ND
C103 C104 C301	3	CAP CER 10UF 25V X5R 0603	10uF		0603	Murata	GRM188R61E106MA73	Y	Y	490-12737-1-ND
C105 C107 C211 C300	4	CAP CER 1UF 50V X5R 0603	1uF		0603	Murata	GRT188R61H105KE13D	Y	Y	490-10673-1-ND
C106	1	CAP CER 220UF 6.3V X5R 1210 20%	22uF		1206	Murata	CL31A226MQHNNE	Y	Y	1276-1771-1-ND
C109 C110 C111 C112 C113 C114 C115 C302 C304 C305 C306 C312	12	CAP CER 0.1UF 50V X7R 0402	0.1uF		0402	Murata	GCM155R71H104KE02	Y	Y	490-14514-1-ND
C122	1	CAP CER 0.01UF 25V 0402	10nF		0402	Kemet	C0402C103M3RAC7867	Y	Y	399-14267-1-ND
D11 D12 D13 D16 D17 D19 D21	7	Green LED	150060GS75000		0603	Würth Elektronik	150060GS75000	Y	Y	732-4971-1-ND
D14	1	Schottky Barrier Diode, 2.0 A, 20 V	NSR20F20NX		DSN2 0603	onsemi	NSR20F20NX	Y	Y	NSR20F20NXT5GOSCT-ND
D20	1	Red LED	150060RS75000		0603	Würth Elektronik	150060RS75000	Y	Y	732-4978-1-ND
FB1	1	Ferrite bead/Impedance type filter	220@100M		0805	Murata	BLM21AG221SH1	Y	Y	MOUSER: 81-BLM21AG221SH1D
J1 J2 J3 J9 J102	5	Standard 1x2pin 100mil Pitch Header	613 002 111 21		1x2pin 100mil	Würth Elektronik	613 002 111 21	Y	Y	732-5315-ND
J10 J17	2	USB Micro USB Type-B Connector	629105136821		Micro USB 1/2 B	Würth	629105136821	Y	Y	732-3155-1-ND
J13 J500	2	Standard Arm Cortex Debug Connector	FTSH-105-01-F-DV-K		2x5pin 50mil Cortex Debug	Samtec	FTSH-105-01-F-DV-K	Y	Y	SAM8796-ND
J301	1	Standard 1x6pin 100mil Pitch Header FEMALE	61300611821		1x6pin 100mil	Würth Elektronik	61300611821	Y	Y	609-3263-ND
J303	1	5pin Screw Terminal 100mil pitch 16-30AWG 150V 10A	282834-5		5pin 100mil	TE Connectivity	282834-5	Y	Y	A98336-ND
Shunt pieces for 2 pin jumpers	6	2 Position Shunt	0.1"		2 Position Shunt	Samtec	SNT-100-BK-T-H	Y	Y	SAM8972-ND
Q1	1	Small Signal MOSFET 60V 115mA 7.5 Ohm Single N-Channel SOT-23	2N7002L		SOT-23	onsemi	2N7002L	Y	Y	2N7002LCT-ND
R18 R31 R100 R102 R307 R308	6	RES SMD 20K OHM 1% 1/8W 0805	20K		0805	Vishay	CRCW080520K0FKEAC	Y	Y	541-4133-1-ND
R29 R101	2	RES SMD 221 OHM 1% 1/8W 0805	221		0805	Vishay	CRCW0805221RFFK	Y	Y	541-221CCT-ND
R32 R33 R34 R35	4	RES SMD 150 OHM 1% 1/10W 0603	150		0603	Vishay	CRCW0603150RFFK	Y	Y	541-150HCT-ND
R38	1	RES SMD 100K OHM 1% 1/8W 0805	100K		0805	Vishay	CRCW0805100KFFK	Y	Y	541-100KCCT-ND
R44	1	RES 15K OHM 1% 1/8W 0805	15K		0805	Vishay	CRCW080515K0FKEAC	Y	Y	541-4136-1-ND
R39 R43 R51 R54 R58 R61	6	RES SMD 10K OHM 1% 1/8W 0805	10K		0805	Vishay	CRCW080510K0FFK	Y	Y	541-10.0KCCT-ND
R45 R46	2	RES SMD 33.2 OHM 1% 1/10W 0603	33.2		0603	Vishay	CRCW060333R2FFK	Y	Y	541-33.2HCT-ND
R49	1	RES SMD 221 OHM 1% 1/10W 0603	221		0603	Vishay	CRCW0603221RFFK	Y	Y	541-221HCT-ND
R50 R52 R53 R55 R65 R71	6	RES SMD 8.87K OHM 1% 1/10W 0603	8.87K		0603	Vishay	CRCW06038K87FFK	Y	Y	541-8.87KHCT-ND
R56 R57 R59 R60 R62 R63	6	RES SMD 47.5 OHM 0.1% 1/10W 0603	47.5		0603	Panasonic	ERA-3AEB47R5V	Y	Y	P47.5DBCT-ND
R70	1	RES SMD 5.11K OHM 1% 1/10W 0603	5.11K		0603	Vishay	CRCW06035K11FFK	Y	Y	541-5.11KHCT-ND
R73 R74	2	RES SMD 0 OHM 1% 1/10W 0603	0		0603	Stackpole	RMCF0603ZT0R00	Y	Y	RMCF0603ZT0R00CT-ND
R300	1	RES SMD 10K OHM 0.1% 1/10W 0603	10K		0603	Panasonic	ERA-3AEB103V	Y	Y	P10KDBCT-ND
R350	1	3362P 250mil Square Trimptot Trimming Potentiometer	10k		250mil	Bourns Inc.	3362P-1-103LF	Y	Y	3362P-103LF-ND
RJ2 RJ6 RJ13	3	Generic 0201 SMD Resistor	0		0201	Stackpole	RMCF0201ZT0R00	Y	Y	RMCF0201ZT0R00CT-ND
SW1	1	MINI SLIDE SWITCH	450301014042		SLIDE1 THT	Würth Elektronik	450301014042	Y	Y	732-7045-1-ND
SW3	1	TACT SWITCH	434121025816		MOM1 SMD	Würth Elektronik	434121025816	Y	Y	732-7045-1-ND
U6 U102	2	RS-485 Driver	ADM485ARMZ		MSOP-8	Analog Devices	ADM485ARMZ	Y	Y	ADM485ARMZ-ND
U10 U15	2	1.8V Voltage Regulator, LDO, Ultra Low Noise, Ultra Low Iq, 500 mA	NCP705		WDFN6	onsemi	NCP705MT33TCG	Y	Y	NCP705MT33TCGOSCT-ND
U11	1	32-bit Arm Cortex-M7 480MHz MCU	STM32H743ZI		LQFP144	ST Microelectronics	STM32H743ZIT6	Y	Y	497-17721-ND
U12	1	USB to BASIC UART IC	FT230X		QFN16 4x4	FTDI	FT230X-QR	Y	Y	768-1130-1-ND
U100	1	Rotary Position Sensor IC	NCS32100		QFN40	onsemi	NCS32100XMTXG	Y	Y	488-NCS32100XMTXGCT-ND
U300	1	300mA, Ultra-Low Noise and High PSRR Adjustable LDO A Version 5V5IN	NCP164A-ADJ		WDFN6	onsemi	NCP164AMTADJTAG	y	Y	488-NCP164AMTADJTAGCT-ND
U302 U303	2	4-Bit 100 Mb/s Configurable Dual-Supply Level Translator	NLSX4014		TSSOP-14	onsemi	NLSX4014DTR2G	Y	Y	NLSX4014DTR2GOSCT-ND