

Type 2NR EVK Rev4 BOM



RefDes	PN	L	W	T	X	Y	Rotation	Value	Short Description	Manufacturer	Category
Surface Mounted											
Q1	2N7002DW	2.10	2.00	1.10	30.620	18.325	270		Dual N channel MOSFET, 60V, 115mA, SC70 6 / SOT 363.	onsemi	MOSFET (Dual N channel)
Q2	2N7002DW	2.10	2.00	1.10	6.250	87.000	270		Dual N channel MOSFET, 60V, 115mA, SC70 6 / SOT 363.	onsemi	MOSFET (Dual N channel)
Q3	2N7002DW	2.10	2.00	1.10	6.250	83.000	270		Dual N channel MOSFET, 60V, 115mA, SC70 6 / SOT 363.	onsemi	MOSFET (Dual N channel)
BAT1	BK-883	30.73	19.86	4.21	14.200	18.000	90		CR2032/20 mm coin cell retainer, SMD, 1 cell, ~3.96 mm height.	MPD (Memory Protection Devices)	Battery Holder / Retainer
CN4	5015	2.70	1.00	1.50	56.550	29.400	270		PC TEST POINT MINIATURE	Keystone Electronics	Test Points
X2	830069526	1.60	1.20	0.40	36.600	21.650	270	32.000MHz	32 MHz quartz crystal, 1.6×1.2 mm, 8 pF load, ±15 ppm, SMD.	Würth Elektronik	Crystal (MHz)
D1	BAT54C	2.85	2.33	1.15	5.150	50.800	270		Dual Schottky diode, common cathode, SOT 23, 30 V, 200 mA.	Nexperia / Diodes	Diode (Schottky, dual)
EF1	BLM18PG2215N1D	1.60	0.80	0.95	39.450	11.400	90	1000.00	Ferrite bead, 0603, 220 Ω @100 MHz, 1.4 A, 100 mΩ max DCR.	Murata	Ferrite Bead / EMI Filter
R1	CR06-512JV	0.60	0.30	0.25	36.500	4.750	90	5.1k	Chip resistor, 0603 series, 5.1 kΩ, ±5%, 0.05 W.	Hokuriku (HDK)	Resistor (Chip, Thick Film)
R2	CR06-512JV	0.60	0.30	0.25	47.250	4.750	90	5.1k	Chip resistor, 0603 series, 5.1 kΩ, ±5%, 0.05 W.	Hokuriku (HDK)	Resistor (Chip, Thick Film)
SW0	EVPA0202K	4.30	2.90	1.90	56.500	38.250	0		Tactile switch, 3.5×2.9×1.7 mm, SPST NO, 1.6 N, 20 mA 15 V, SMD.	Panasonic	Tactile Switch
SW1	EVPA0202K	4.30	2.90	1.90	56.500	48.250	0		Tactile switch, 3.5×2.9×1.7 mm, SPST NO, 1.6 N, 20 mA 15 V, SMD.	Panasonic	Tactile Switch
SW2	EVPA0202K	4.30	2.90	1.90	56.500	58.250	0		Tactile switch, 3.5×2.9×1.7 mm, SPST NO, 1.6 N, 20 mA 15 V, SMD.	Panasonic	Tactile Switch
SW3	EVPA0202K	4.30	2.90	1.90	56.500	68.250	0		Tactile switch, 3.5×2.9×1.7 mm, SPST NO, 1.6 N, 20 mA 15 V, SMD.	Panasonic	Tactile Switch
SW4	EVPA0202K	4.30	2.90	1.90	27.200	4.000	270		Tactile switch, 3.5×2.9×1.7 mm, SPST NO, 1.6 N, 20 mA 15 V, SMD.	Panasonic	Tactile Switch
CN5	FTSH-105-01-L-DV-K-P-TR	6.35	5.84	5.97	54.200	77.900	90		Header, 1.27 mm pitch, 2×5, SMD, gold flash, keyed shroud.	Samtec	Header (Board to Board)
CN6	FTSH-105-01-L-DV-K-P-TR	6.35	5.84	5.97	35.000	12.250	180		Header, 1.27 mm pitch, 2×5, SMD, gold flash, keyed shroud.	Samtec	Header (Board to Board)
C12	GRM0335C1H1R7WA01D	0.60	0.30	0.33	6.300	105.720	90	1.7p	MLCC, 0201, 1.7 pF, 50 V, COG/NPO, ±0.05 pF.	Murata	Capacitor (MLCC COG)
C13	GRM0335C1H2R4BA01D	0.60	0.30	0.33	5.690	106.250	270	2.4p	MLCC, 0201, 2.4 pF, 50 V, COG/NPO, ±0.1 pF.	Murata	Capacitor (MLCC COG)
C4	GRM0335C1E331JA01D	0.60	0.30	0.33	32.500	99.800	270	330p	MLCC, 0201, 330 pF, 25 V, COG/NPO, ±5%.	Murata	Capacitor (MLCC COG)
C6	GRM0335C1E331JA01D	0.60	0.30	0.33	32.500	98.200	270	330p	MLCC, 0201, 330 pF, 25 V, COG/NPO, ±5%.	Murata	Capacitor (MLCC COG)
C3	GRM153R60J225ME95D+A02	1.00	0.50	0.33	21.300	39.100	270	2.2u	MLCC, 0603, 2.2 μF, 6.3 V, X5R, ±20%.	Murata	Capacitor (MLCC X5R)
C8	GRM153R60J225ME95D+A02	1.00	0.50	0.33	12.300	39.100	270	2.2u	MLCC, 0603, 2.2 μF, 6.3 V, X5R, ±20%.	Murata	Capacitor (MLCC X5R)
C23	GRM153R60J225ME95D+A02	1.00	0.50	0.33	35.050	24.900	0	2.2u	MLCC, 0603, 2.2 μF, 6.3 V, X5R, ±20%.	Murata	Capacitor (MLCC X5R)
C2	GRM155R71C104KA88D	1.00	0.50	0.55	25.900	39.050	270	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C7	GRM155R71C104KA88D	1.00	0.50	0.55	16.950	39.100	270	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C14	GRM155R71C104KA88D	1.00	0.50	0.55	8.050	99.900	180	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C16	GRM155R71C104KA88D	1.00	0.50	0.55	27.600	87.900	270	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C22	GRM155R71C104KA88D	1.00	0.50	0.55	39.700	21.450	90	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C26	GRM155R71C104KA88D	1.00	0.50	0.55	46.250	24.000	180	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C27	GRM155R71C104KA88D	1.00	0.50	0.55	39.700	30.850	270	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C28	GRM155R71C104KA88D	1.00	0.50	0.55	46.250	26.400	180	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C29	GRM155R71C104KA88D	1.00	0.50	0.55	36.850	26.200	0	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C30	GRM155R71C104KA88D	1.00	0.50	0.55	46.250	28.400	180	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C31	GRM155R71C104KA88D	1.00	0.50	0.55	36.850	23.950	0	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C32	GRM155R71C104KA88D	1.00	0.50	0.55	42.800	30.850	270	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C33	GRM155R71C104KA88D	1.00	0.50	0.55	38.750	21.450	90	0.1u	MLCC, 0402, 0.1 μF, 16 V, X7R, ±10%.	Murata	Capacitor (MLCC X7R)
C11	GRM155R61A105KE15D	1.00	0.50	0.55	35.000	19.260	0	1u	MLCC, 0402, 1.0 μF, 10 V, X5R, ±10%.	Murata	Capacitor (MLCC X5R)
C17	GRM155R61A105KE15D	1.00	0.50	0.55	41.250	21.450	90	1u	MLCC, 0402, 1.0 μF, 10 V, X5R, ±10%.	Murata	Capacitor (MLCC X5R)
C18	GRM155R61A105KE15D	1.00	0.50	0.55	42.750	21.450	90	1u	MLCC, 0402, 1.0 μF, 10 V, X5R, ±10%.	Murata	Capacitor (MLCC X5R)
C21	GRM155R61A105KE15D	1.00	0.50	0.55	35.050	23.950	0	1u	MLCC, 0402, 1.0 μF, 10 V, X5R, ±10%.	Murata	Capacitor (MLCC X5R)
C24	GRM155R61A105KE15D	1.00	0.50	0.55	42.000	21.450	90	1u	MLCC, 0402, 1.0 μF, 10 V, X5R, ±10%.	Murata	Capacitor (MLCC X5R)
C25	GRM155R61A105KE15D	1.00	0.50	0.55	42.300	20.150	0	1u	MLCC, 0402, 1.0 μF, 10 V, X5R, ±10%.	Murata	Capacitor (MLCC X5R)
C19	GRM188R61A475KE15D	1.60	0.80	0.90	45.050	20.850	90	4.7u	MLCC, 0603, 4.7 μF, 10 V, X5R, ±10%.	Murata	Capacitor (MLCC X5R)
C20	GRM188R61A475KE15D	1.60	0.80	0.90	43.800	20.850	90	4.7u	MLCC, 0603, 4.7 μF, 10 V, X5R, ±10%.	Murata	Capacitor (MLCC X5R)
C1	GRM188R61E106MA73D+A01	1.70	0.90	1.00	27.000	39.200	270	10u	MLCC, 0603, 10 μF, 25 V, X5R, ±20%.	Murata	Capacitor (MLCC X5R)
C5	GRM188R61E106MA73D+A01	1.70	0.90	1.00	18.050	39.250	270	10u	MLCC, 0603, 10 μF, 25 V, X5R, ±20%.	Murata	Capacitor (MLCC X5R)
C9	GRM188R61E106MA73D+A01	1.70	0.90	1.00	9.050	101.550	0	10u	MLCC, 0603, 10 μF, 25 V, X5R, ±20%.	Murata	Capacitor (MLCC X5R)
LED0	LTST-C191KGKT	1.60	0.80	0.65	2.400	88.500	180	GREEN	Green SMD LED, 0603, 571 nm dom, 2.0 V typ @20 mA, 35 mcd, 130°.	Lite On	LED (SMD)
LED1	LTST-C191KGKT	1.60	0.80	0.65	2.400	85.500	180	GREEN	Green SMD LED, 0603, 571 nm dom, 2.0 V typ @20 mA, 35 mcd, 130°.	Lite On	LED (SMD)
LED2	LTST-C191KGKT	1.60	0.80	0.65	2.400	82.500	180	GREEN	Green SMD LED, 0603, 571 nm dom, 2.0 V typ @20 mA, 35 mcd, 130°.	Lite On	LED (SMD)
LED3	LTST-C191KGKT	1.60	0.80	0.65	2.400	79.500	180	GREEN	Green SMD LED, 0603, 571 nm dom, 2.0 V typ @20 mA, 35 mcd, 130°.	Lite On	LED (SMD)
LED4	LTST-C191KGKT	1.60	0.80	0.90	30.620	15.325	270	GREEN	Green SMD LED, 0603, 571 nm dom, 2.0 V typ @20 mA, 35 mcd, 130°.	Lite On	LED (SMD)
X1	MU00626-32-768K	2.05	1.20	0.60	16.000	104.900	90	32.768KHz	32.768 kHz tuning fork crystal, 2.05×1.2 mm, 6 pF load, 80 kΩ ESR.	NDK (Nihon Dempa Kogyo)	Crystal (kHz Tuning Fork)
R25	PFR03S-000-XNH	0.60	0.30	0.26	26.150	94.000	0	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R26	PFR03S-000-XNH	0.60	0.30	0.26	24.900	94.000	0	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R27	PFR03S-000-XNH	0.60	0.30	0.26	23.650	94.000	0	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R28	PFR03S-000-XNH	0.60	0.30	0.26	24.550	86.250	180	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R30	PFR03S-000-XNH	0.60	0.30	0.26	23.450	86.250	180	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R31	PFR03S-000-XNH	0.60	0.30	0.26	22.350	86.250	180	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R32	PFR03S-000-XNH	0.60	0.30	0.26	7.650	85.200	0	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R33	PFR03S-000-XNH	0.60	0.30	0.26	6.250	89.000	270	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R34	PFR03S-000-XNH	0.60	0.30	0.26	7.650	81.100	0	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R35	PFR03S-000-XNH	0.60	0.30	0.26	7.650	84.600	180	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R37	PFR03S-000-XNH	0.60	0.30	0.26	31.600	99.500	180	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R38	PFR03S-000-XNH	0.60	0.30	0.26	31.600	98.400	180	0.00	0 Ω jumper resistor, 0201, 0.05 W, thick film.	Cyntec (Delta)	Resistor (Jumper 0Ω)
R8	PFR03S-104-JNH	0.60	0.30	0.26	36.075	17.500	270	100k	Chip resistor, 0201, 100 kΩ, ±5%, 0.05 W.	Cyntec (Delta)	Resistor (Chip, Thick Film)
R10	PFR03S-104-JNH	0.60	0.30	0.26	54.250	18.650	0	100k	Chip resistor, 0201, 100 kΩ, ±5%, 0.05 W.	Cyntec (Delta)	Resistor (Chip, Thick Film)
R24	PFR03S-104-JNH	0.60	0.30	0.26	47.650	69.000	0	100k	Chip resistor, 0201, 100 kΩ, ±5%, 0.05 W.	Cyntec (Delta)	Resistor (Chip, Thick Film)
R29	PFR03S-104-JNH	0.60	0.30	0.26	7.850	99.200	0	100k	Chip resistor, 0201, 100 kΩ, ±5%, 0.05 W.	Cyntec (Delta)	Resistor (Chip, Thick Film)
R14	PFR03S-221-JNH	0.60	0.30	0.26	1.900	87.500	0	220.00	Chip resistor, 0201, 220 Ω, ±5%, 0.05 W.	Cyntec (Delta)	Resistor (Chip, Thick Film)
R15	PFR03S-221-JNH	0.60	0.30	0.26	1.900	81.500	0	220.00	Chip resistor, 0201, 220 Ω, ±5%, 0.05 W.	Cyntec (Delta)	Resistor (Chip, Thick Film)
R16	PFR03S-221-JNH	0.60	0.30	0.26	1.900	86.500	0	220.00	Chip resistor, 0201, 220 Ω, ±5%, 0.05 W.	Cyntec (Delta)	Resistor (Chip, Thick Film)
R17	PFR03S-221-JNH	0.60	0.30	0.26	1.900	80.500	0	220.00	Chip resistor, 0201, 220 Ω, ±5%, 0.05 W.	Cyntec (Delta)	Resistor (Chip, Thick Film)
R9	ERJ1GNJ2R2C	0.60	0.30	0.26	44.400	19.000	180	2.20	Chip resistor, 0201, 2.2 Ω, ±5%, 0.05 W, AEC Q200.	Panasonic	Resistor (Chip, Thick Film, AEC Q200)
R11	CR06-510JV	0.60	0.30	0.26	36.850	25.350	180	51.00	Chip resistor, 0603 series, 51 Ω, ±5%, 0.05 W.	Hokuriku (HDK)	Resistor (Chip, Thick Film)
R13	ERJ1GNJ561C	0.60	0.30	0.26	30.620	13.375	270	560.00	Chip resistor, 0201, 560 Ω, ±5%, 0.05 W, AEC Q200.	Panasonic	Resistor (Chip, Thick Film, AEC Q200)
CN2	U.FL-R-SMT-1(60)	3.10	3.00	1.45	3.200	100.450	270		Hirose U.FL receptacle, 50 Ω, SMT straight, up to 6–8 GHz.	Hirose Electric	RF Connector (U.FL)
CN1	USB4110-GF-A	11.30	7.70	3.46	41.900	3.770	180		USB C receptacle (USB 2.0), SMT right angle, 16 contacts, 5 A.	GCT (Global Connector Technology)	USB Connector (USB C, Receptacle)
U1	XX_TYPE-2NR_ES2	7.40	7.00		10.400	106.300	0		(custom placeholder)	(Custom)	Custom / Mechanical
IC7	FSA2466UMX	2.60	1.80	0.55	46.500	60.000	270		Dual DPDT analog switch, 1.65–4.45 V, rON=1.6 Ω, ~240 MHz BW.	onsemi	Analog Switch (Dual DPDT)
IC8	FSA2466UMX	2.60	1.80	0.55	46.500	55.000	270		Dual DPDT analog switch, 1.65–4.45 V, rON=1.6 Ω, ~240 MHz BW.	onsemi	Analog Switch (Dual DPDT)
IC9	FSA2466UMX	2.60	1.80	0.55	46.500	50.000	270		Dual DPDT analog switch, 1.65–4.45 V, rON=1.6 Ω, ~240 MHz BW.	onsemi	Analog Switch (Dual DPDT)
IC4	MX25R6435FZNILO	6.00	5.00	0.80	24.250	90					