

BOM number: 00527-BOM-02		Title: Gen 3 US E-Patch PCB Assembly			Date: 4-Oct-00			© Nexan Telemed Ltd		
Builds part: ASS-00527-01		Change request			DCR-0352			Tel +44 (0) 1223 713500		
								Fax +44 (0) 1223 713501		
Item	Qty	Reference	Description	Nexan Part No.	Manufacturer.	Man. Part No.	Supplier	Notes		
1	1	ANT1	869/916MHz EPatch loop antenna	MEC-00374-01	Nexan	00374-MAD-01				
2	2	C1,C2	Capacitor 33p 50V 0603 COG	CAP-0010	Rohm	MCH185A330J				
3	15	C3,C4,C5,C6,C7,C8,C25,C26,C28,C29,C52,C56,C61,C69,C70	Capacitor 100n 16V 0603 X7R	CAP-0034	Rohm	MCH183C104K				
4	2	C9,C30	Capacitor SM Tant 10u 6V3 Case A	CAP-0089	AVX	TAJA106K006X				
5	2	C10,C54	Capacitor 2n2 50V 0603 X7R	CAP-0031	AVX	MCH185C222K				
6	6	C11,C12,C15,C23,C64,C66	Capacitor 82p 50V 0603 COG	CAP-0086	Rohm	MCH185A820J				
7	1	C13,C16	Capacitor 1p8 50V 0603 COG	CAP-0118	Rohm	MCH185A1R8C				
8	1	C14	Ceramic trimmer SM 2mm 2.5-6 pF	CAP-0087	MuRata	TZV02 series				
9	1	C17	Capacitor 2p2 50V 0603 COG	CAP-0066	Rohm	MCH185A2R2C				
10	1	C18	Capacitor 220p 50V 0603 COG	CAP-0007	Rohm	MCH185A221J				
11	1	C19	Ceramic trimmer SM 2mm 3-10pF	CAP-0088	MuRata	TZV02 series				
12	2	C20,C65	Capacitor 22p 50V 0603 COG	CAP-0006	Rohm	MCH185A220J				
13	1	C21	Capacitor 15n 50V 0603 X7R	CAP-0082	Rohm	MCH182C153K				
14	3	C22,C53,C58	Capacitor 100p 50V 0603 COG	CAP-0002	Rohm	MCH185A101J				
15	2	C24,C27	Capacitor SM Tant 100u 6V3 Case C	CAP-0092	AVX	TPSC107K006R0150				
18	3	C31,C40,C48	Capacitor SM Tant 4u7 10V Case A	CAP-0093	AVX	TAJA475K010X				
19	5	C32,C38,C42,C46,C72	Capacitor SM Tant 1u 25V Case A	CAP-0069	AVX	TAJA105K025X				
20	7	C33,C37,C39,C45,C47,C62,C63	Capacitor 4p7 50V 0603 COG	CAP-0017	Rohm	MCH185A4R7C				
21	6	C34,C36,C41,C44,C49,C51	Capacitor 1n 50V 0603 X7R	CAP-0029	Rohm	MCH185C102K				
22	3	C35,C43,C50	Capacitor 4n7 50V 0603 X7R	CAP-0085	Rohm	MCH185C472K				
25	1	C55	Capacitor SM Tant 0.47u 25V Case A	CAP-0091	AVX	TAJA474K25R				
26	2	C60,C57	Capacitor 22n 25V 0603 X7R	CAP-0084	Rohm	MCH182C223K				
27	2	C59,C71	Capacitor 220n 16V 0805 X7R	CAP-0108	Rohm	MCH213C224K				
28	1	C65	Capacitor 22p 50V 0603 COG	CAP-0006	Rohm	MCH185A220J				
29	2	C68,C67	Capacitor 10n 50V 0603 X7R	CAP-0030	Rohm	MCH185C103K				
30	1	D1	SMD Schottky diode	SEM-0076	Zetex	ZHCS500				
31	1	D2	Signal diode SM dual common cathode	SEM-0055	Fairchild	BAW56				
32	2	D4,D3	Schottky diode SM dual series connection	SEM-0077	ST	BAT54SFILM				
33	1	J1	ELCO SM wiping contact connector 4way	CON-0108	ELCO	58.9155.004.000.010				
34	1	J2	ELCO SM wiping contact connector 3way	CON-0107	ELCO	58.9155.003.000.015				
35	1	J3	Edge finger 2W 0.1" (no component fitted)							
36	1	J5	Jack socket 2.5mm 3 pole SM	CON-0080	SMK	SMK2009-0201				
37	1	LD1	Not Fitted							
38	13	L1,L2,L5,L6,L9,L10,L11,L12,L13,L14,L15,L16,L17	Chip Ferrite 1000R @ 100MHz	IND-0020	MuRata	BLM21A102S				
39	2	L3,L4	Inductor 0603 150nH wirewound	IND-0021	Coilcraft	0603CS-R15XJBC				
40	2	L8,L7	Inductor SM 1210 47uH 300mA	IND-0038	Murata	LQH3C470K34				
41	1	Q1	FET P-Channel Enhancement mode	SEM-0028	Siliconix	TP0101T				
42	5	R1,R3,R4,R51,R57	Resistor SM 33K 1% 0603	RES-0011	Rohm	MCR03EZPF333				
43	1	R2	Resistor SM 330R 1% 0603	RES-0085	Rohm	MCR03EZPF331				
44	10	R17,R18,R23,R27,R28,R33,R36,R37,R41,R48	Resistor SM 1M 1% 0603	RES-0083	Rohm	MCR03EZPF105				

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45	4	R6,R8,R58,R46	Resistor SM 47K 1% 0603	RES-0035	Rohm	MCR03EZPF473				
46	1	R7	Resistor SM 1K2 1% 0603	RES-0091	Rohm	MCR03EZPF122				
47	1	R9	Resistor SM 160K 1% 0603	RES-0101	Rohm	MCR03EZPF164				
48	2	R69,R10	Resistor SM 120K 1% 0603	RES-0018	Rohm	MCR03EZPF124				
49	1	R11	Resistor SM 0R0 1% 0603	RES-0007	Rohm	MCR03EZHZJ000				
50	1	R12	Resistor SM 15K 1% 0603	RES-0016	Rohm	MCR03EZPF153				
51	5	R13,R20,R30,R39,R68	Resistor SM 100K 1% 0603	RES-0008	Rohm	MCR03EZPF104				
53	6	R16,R22,R25,R31,R34,R42	Resistor SM 10M 5% 0603	RES-0063	Rohm	MCR18EZHZJ106				
55	3	R19,R29,R38	Resistor SM 270K 1% 0603	RES-0084	Rohm	MCR03EZPF274				
57	4	R21,R32,R40,R52	Resistor SM 22K 1% 0603	RES-0052	Rohm	MCR03EZPF223				
58	7	R43,R44,R45,R47,R49,R50	Resistor SM 220K 1% 0603	RES-0023	Rohm	MCR03EZPF224				
61	1	R54	Resistor SM 3K3 1% 0603	RES-0086	Rohm	MCR03EZPF332				
62	2	R55,R56	Resistor SM 180R 1% 0603	RES-0082	Rohm	MCR03EZPF181				
63	13	R59,R60,R61,R15,R24,R26,R35,R64,R65,R66,R67,R70,R71	Resistor SM 10K 1% 0603	RES-0037	Multicomp					
65	1	U1	LDO adjustable regulator	SEM-0118	Maxim	MAX8864SEUK-T				
66	1	U2	RISC microcontroller 128K flash 4K RAM 4MHz	SEM-0078	Atmel	ATMega103L-4AC				
67	1	U3	MAX6301CSA Reset Controller	SEM0141	Maxim	MAX6301CSA				
68	1	U4 (MUST BE PROGRAMMED BEFORE FITTING)	8 bit low voltage RISC micro 512B ROM	SEM-0084	Microchip	PIC16LC620A-04SS			Print label showing Firmware Version	
69	1	U5	Single gate schmitt inverter	SEM-0079	Texas Instruments	SN74AHC1G14DBVR				
70	1	U7	TH7108 Issue 2 868/815 MHz FSK/ASK/FM TX	SEM-0080	Thesys	TH7108.2				
71	1	U8	Low power switching regulator	SEM-0081	Maxim	MAX859CUA				
72	3	U10,U11,U12	Op Amp TLV2434CPW	SEM-0082	Texas Instruments	TLV2434CPW				
73	1	U13	Op Amp LMV324MT	SEM-0083	National Semiconductor	LMV324MT				
74	1	X1	Crystal SM 4MHz	CRY-0014	IQD	A120F				
75	1	X2	Crystal 916.5MHz TX (28.640625MHz)	CRY-0030	Hy-Q	28.640625MHz	00424-CS			
76	1	PCB	PCB-00284-03							
77	2	L18,L19	Inductor 0603 39nH wirewound	IND-0041	Coilcraft	0603CS-39NXJBC				
78	1	R62	Resistor SM 470R 1% 0603	RES-0019	Rohm	MCR03EZPF471				
79	2	C73,C74	Capacitor 47n 16V 0603 X7R	CAP-0038	Rohm	MCH183C473K				
80	1	Firmware for U2	PRO-00527U2V1_5		Nexan	PRO-00527U4V1_5			Programm after fit	
81	1	Firmware for U4	PRO-00527U4V1_0		Nexan	PRO-00527U4V1_0			Record software version on J/C.	
ORIGINATOR Barry Elborn			CHECKED Duncan Evans	APPROVED Justin Pisani		RELATED DOCS	Document number			
						Manufacturing process	00489-MP-0A			
						Assembly Instruction	N/A			
						Test specification	00504-TS-0A			
						Circuit Diagram	00283-CD-0A			
DATE	10/4/00		DATE	04/10/00		DATE				