

Partlist MiCard Multi V2					
			6		
Part	Count	Value	Description	Package	Comments
C1	17	100nF	Chip Kondens./25Volt	C0603K	
C2		100nF	Chip Kondens./25Volt	C0603K	
C3		100nF	Chip Kondens./25Volt	C0603K	
C4		100nF	Chip Kondens./25Volt	C0603K	
C5	1	47pF	Chip Kondens./25Volt	C0603K	
C6	2	39pF	Chip Kondens./25Volt	C0603K	
C7		39pF	Chip Kondens./25Volt	C0603K	
C8	9	47nF/50V	Chip Kondens./50Volt/	C0603K	50 Volt!
C9		47nF/50V	Chip Kondens./50Volt/	C0603K	50 Volt!
C10		47nF/50V	Chip Kondens./50Volt/	C0603K	50 Volt!
C11		47nF/50V	Chip Kondens./50Volt/	C0603K	50 Volt!
C12	2	150pF_2%_50V_COG_NPO	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C13	3	100uF_10V_Standard	TANTAL/Chip Kondens. /10Volt/Std.	C/6032-28	z.B. AVX TAJ Case C 1.2Ohm TAJC107*010#1R2
C14		100nF	Chip Kondens./25Volt	C0603K	
C15		100nF	Chip Kondens./25Volt	C0603K	
C16	1	220pF_2%_50V_COG	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C17	5	10nF	Chip Kondens./25Volt	C0603K	
C18		10nF	Chip Kondens./25Volt	C0603K	
C19		100nF	Chip Kondens./25Volt	C0603K	
C20		100nF	Chip Kondens./25Volt	C0603K	
C21	1	18pF_5%_COG_NPO	Chip Kondens./5%/COG	C0603K	COG or NPO
C22	3	10pF	Chip Kondens./COG	C0603K	COG or NPO
C23		10pF	Chip Kondens./COG	C0603K	COG or NPO
C24		10pF	Chip Kondens./COG	C0603K	COG or NPO
C25	4	22pF	Chip Kondens./COG	C0603K	COG or NPO
C26	3	33pF	Chip Kondens./COG	C0603K	COG or NPO
C27	1	3.3nF	Chip Kondens./25Volt	C0603K	
C28	1	22uF_10V_Standard	TANTAL/Chip Kondens./10Volt/Std.	A/3216-18	TAJA226*010#
C29	1	330pF	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO
C30		47nF/50V	Chip Kondens./50Volt/	C0603K	

C31		150pF_2%_50V_COG_NPO	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C32	1	180pF_2%_50V_COG	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C33	1	220pF_2%_50V_COG	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C34		47nF/50V	Chip Kondens./50Volt/	C0603K	50 Volt!
C35		47nF/50V	Chip Kondens./50Volt/	C0603K	50 Volt!
C36		47nF/50V	Chip Kondens./50Volt/	C0603K	50 Volt!
C37		47nF/50V	Chip Kondens./50Volt/	C0603K	50 Volt!
C38		10nF	Chip Kondens./25Volt	C0603K	
C39		10nF	Chip Kondens./25Volt	C0603K	
C40	1	12pF	Chip Kondens./COG	C0603K	COG or NPO
C41	3	10uF_10V_STD	TANTAL/Chip Kondens./10Volt/Std.	A/3216-18	AVX TAJA106*010#3R5
C42		100nF	Chip Kondens./25Volt	C0603K	
C43	1	120pF_2%_50V_COG_NPO	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C44	1	820pF_2%_50V_COG_NPO	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C45	2	2.7pF_2%_50V_COG_NPO	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C46		2.7pF_2%_50V_COG_NPO	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C47	1	1.8pF_2%_COG_NPO	Chip Kondens./2%/50Volt/COG	C0603K	COG or NPO 50 Volt!
C48		100uF_10V_Standard	TANTAL/Chip Kondens. /10Volt/Std.	C/6032-28	z.B. AVX TAJ Case C 1.2Ohm TAJC107*010#1R2
C49		100uF_10V_Standard	TANTAL/Chip Kondens. /10 Volt/Std.	C/6032-28	z.B. AVX TAJ Case C 1.2Ohm TAJC107*010#1R2
C50		33pF	Chip Kondens./COG	C0603K	COG or NPO
C51		33pF	Chip Kondens./COG	C0603K	COG or NPO
C52		22pF	Chip Kondens./COG	C0603K	COG or NPO
C53		22pF	Chip Kondens./COG	C0603K	COG or NPO
C54		100nF	Chip Kondens./25Volt	C0603K	
C55		10nF	Chip Kondens./25Volt	C0603K	
C56		100nF	Chip Kondens./25Volt	C0603K	
C57		100nF	Chip Kondens./25Volt	C0603K	
C58		100nF	Chip Kondens./25Volt	C0603K	
C59		100nF	Chip Kondens./25Volt	C0603K	
C60		100nF	Chip Kondens./25Volt	C0603K	
C61	1	4,7uF/16 Volt	TANTAL /Chip Kondens. /16 Volt /Std.	B/3528-21R	AVX TAJB475*016#3R5
C62		10uF_10V_STD	TANTAL/Chip Kondens./10Volt/Std.	A/3216-18	Achtung Bauform! Case A auf case B Pads
C63	1	1uF/35V Std.	TANTAL/Chip Kondens./35Volt/Std.	A/3216-18R	AVX TAJA105*035#7R5

C64	1	100uF_10Volt_Std	TANTAL/Chip Kondens./10Volt/Std.	B/3528-21R	AVX TAJB107M010#1R4
C65		100nF	Chip Kondens./25Volt	C0603K	
C66		10uF_10V_STD	TANTAL/Chip Kondens./10Volt/Std.	A/3216-18	AVX TAJA106*010#3R5
C67		100nF	Chip Kondens./25Volt	C0603K	
D1	2	BAS70-04W	Dual Schottky Diode	SC-70_SOT323	Bezeichnung beachten !
D2		BAS70-04W	Dual Schottky Diode	SC-70_SOT323	Bezeichnung beachten !
D3	1	BAS21	BAS21 General purpose high voltage diode	SOT23	
FE1	1	Ferrit			resistor 1206 0R !!
FE2		Ferrit	Ferrit 1800@100MHz z.B. Würth	C0603K	Würth 742792097
IC1	1	SC2560C_OS_CONTR	Legic OS Controller	TQFP100	Legic NT-ware
IC2	1	SC2560C_RF	Legic RF ASIC	SSOP20D8	Legic NT-ware
IC3	2	HWS421D	GaAs SPDT Switch HF	SC74	Hexawave SPDT HF-switch
IC4		HWS421D	GaAs SPDT Switch HF	SC74	Hexawave SPDT HF-switch
IC5	1	M95320-W DW 6	8K SPI EEPROM 2.5-5.5Volt	TSSOP8Wide	ST microelectronics
IC6	1	TCM809	Voltagecontrol and Reset	SC70-3	Maxim alternativ:NXP MAX6348-44W alternativ Microchip TCM809M(auch J,L oderT) ELB TCM809M(J/L/T) VLB
IC7	1	74AHC1G08DCK	TinyLogic HS 2-Input AND gate	SC70-5	Fairchild alternativ NC7S08P5X_NL Texas SN74AHC1G08IDCKR
IC8	1	TUSB3410	TUSB3410(I)VF Serial Port to USB 8051 Controller	LQFP32	TUSB3410(I)VF
IC9	1	24AA128ST	24AA128ST serial 128kbit I2C EEPROM	TSSOP8 wide	z.B.Microchip
IC10	1	TPS2141IPWP	TPS2141IPWP USB Power Distribution switches 5V & adj. LDO ENA active low	HTSSOP-14	Texas Instruments
IC11	1	PCA9553	I2C 4 LED Driver with blink	TSSOP8	z.B. NXP
IC12	1	TLC555CDXX	Low power single universal Timer	SO8	Texas Instruments
JP1	0	DNP nicht bestücken	2mm Connector JST	3pin/2mm	
L1	1	6.8uH	6.8uH_min_50 mA_5%	1008	744762368A Würth alternativ
L2	1	1.5uH	1.5uH_min0.3A_10%_Q>=25	1008	744762515 Würth alternativ
L3	1	1.2uH	1.2uH_min0.2A_5%_Q>=30	1008	744762312 Würth alternativ
L4	1	3.3uH	3.3uH_min0.18A_5%_Q>=20	1008	744762333A Würth alternativ
L5	1	1.0uH	1.0uH_min0.12A_5%_Q>=30	1008	744762310A Würth alternativ
L6	1	6.8uH 0,42 A	WEW-LQ 6,8uH / 0,42A 744032006	1210	744032006 Würth
L7	1	370R at 100MHz 0,32A	WE-CNSW_0805 Stromkompensierte Drossel	WE-CNSW_0805	744231371

L8	1	67R at 100 MHz 0.4A	WE-CNSW_0805 Stromkompensierte Drossel	WE-CNSW_0805	744231061
LED1	1	PLCC2 Led 120 Grad green	Osram LGT-676-xxx	PLCC2	
LED2	1	PLCC2 Led 120 Grad yellow	Osram LYT-676-xxx	PLCC2	
LED3	1	PLCC2 Led 120 Grad red	Osram LST-676-xxx	PLCC2	
NI1	2	EMV Filter	NFM21CC223R1H3	EMC_0805	Murata
NI2		EMV Filter	NFM21CC223R1H3	EMC_0805	Murata
Q1	1	13,56MHz	Crystal 13.56MHz TSS5032A		Tokyo Denpa / Telcona 22pF Load capacitance
Q3	1	JXS53/12MHz	JXS53/12MHz Jauch SMD Quarz		Jauch Q12,0-JXS53-12-30/30-LF
R1	5	47k	Chip Widerstand +-1% 0.1W	R0603	
R2	1	36R_1%_125mW	Chip Widerstand	R1206	Bauform!
R3		47k	Chip Widerstand +-1% 0.1W	R0603	
R4		47k	Chip Widerstand +-1% 0.1W	R0603	
R5		47k	Chip Widerstand +-1% 0.1W	R0603	
R6	12	10K	Chip Widerstand +-1% 0.1W	R0603	
R7		10K	Chip Widerstand +-1% 0.1W	R0603	
R8		10K	Chip Widerstand +-1% 0.1W	R0603	
R9		10K	Chip Widerstand +-1% 0.1W	R0603	
R10		10K	Chip Widerstand +-1% 0.1W	R0603	
R11		10K	Chip Widerstand +-1% 0.1W	R0603	
R12	1	10R	Chip Widerstand +-1% 0.1W	R0603	
R13	1	680R_125mW	Chip Widerstand	R1206	Bauform!
R14	2	470k	Chip Widerstand +-1% 0.1W	R0603	
R15	2	1K2	Chip Widerstand +-1% 0.1W	R0603	
R16	1	270K	Chip Widerstand +-1% 0.1W	R0603	
R17	2	68K	Chip Widerstand +-1% 0.1W	R0603	
R18	2	2K2	Chip Widerstand +-1% 0.1W	R0603	
R19	3	47R	Chip Widerstand +-1% 0.1W	R0603	
R20		47R	Chip Widerstand +-1% 0.1W	R0603	
R21		47R	Chip Widerstand +-1% 0.1W	R0603	
R22	1	330R	Chip Widerstand +-1% 0.1W	R0603	
R23	6	4K7	Chip Widerstand +-1% 0.1W	R0603	
R24	1	12R_250mW	Chip Widerstand	R1206	Bauform!
R25	1	0R	Chip Widerstand	R0805	Bauform!
R26	2	150R_1%_125mW	Chip Widerstand	R1206	Bauform!

R27		150R_1%_125mW	Chip Widerstand	R1206	Bauform!
R28		47k	Chip Widerstand +-1% 0.1W	R0603	
R29		10K	Chip Widerstand +-1% 0.1W	R0603	
R30		10K	Chip Widerstand +-1% 0.1W	R0603	
R31		10K	Chip Widerstand +-1% 0.1W	R0603	
R32	1	1K_2%_250mW	Chip Widerstand	R1206	Bauform!
R33	2	33K	Chip Widerstand +-1% 0.1W	R0603	
R34	1	470R_125mW	Chip Widerstand	R1206	Bauform!
R35		68K	Chip Widerstand +-1% 0.1W	R0603	
R36	1	0R	Chip Widerstand +-1% 0.1W	R1206	ggf 0805
R37		10K	Chip Widerstand +-1% 0.1W	R0603	
R38		10K	Chip Widerstand +-1% 0.1W	R0603	
R39	2	33R	Chip Widerstand +-1% 0.1W	R0603	
R40		33R	Chip Widerstand +-1% 0.1W	R0603	
R41	1	1K5	Chip Widerstand +-1% 0.1W	R0603	
R42		4K7	Chip Widerstand +-1% 0.1W	R0603	
R43		4K7	Chip Widerstand +-1% 0.1W	R0603	
R44		10K	Chip Widerstand +-1% 0.1W	R0603	
R45		2K2	Chip Widerstand +-1% 0.1W	R0603	
R46	1	3K3	Chip Widerstand +-1% 0.1W	R0603	
R47	1	91K	Chip Widerstand +-1% 0.1W	R0603	
R48	1	100k	Chip Widerstand +-1% 0.1W	R0603	
R49	1	15k	Chip Widerstand +-1% 0.1W	R0603	
R50		DNP (1M)	Chip Widerstand +-1% 0.1W	R0603	
R51		470K	Chip Widerstand +-1% 0.1W	R0603	
R52	1	180K	Chip Widerstand +-1% 0.1W	R0603	
R53	1	100R	Chip Widerstand +-1% 0.1W	R0603	
R54	1	150R	Chip Widerstand +-1% 0.1W	R0603	
R55	1	220R	Chip Widerstand +-1% 0.1W	R0603	
R56	1	1K2	Chip Widerstand +-1% 0.1W	R0603	
R57		33K	Chip Widerstand +-1% 0.1W	R0603	
R58	1	1R8	Chip Widerstand +-1% 0.1W	R0603	
R59	1	0R	Chip Widerstand +-1% 0.1W	R0603	
R60		4K7	Chip Widerstand +-1% 0.1W	R0603	
R61		4K7	Chip Widerstand +-1% 0.1W	R0603	
R62		4K7	Chip Widerstand +-1% 0.1W	R0603	

SG1	1	F/SMD8585JS	F/SMD8585 JS SMD Piepser passiv 2-5 Volt		Digisound
T1	3	BC846BWT1G	BC846BW NPN general purpose transistor	SC-70_SOT323	z.B. ONSEMI
T2		BC846BWT1G	BC846BW NPN general purpose transistor	SC-70_SOT323	z.B. ONSEMI
T3		BC846BWT1G	BC846BW NPN general purpose transistor	SC-70_SOT323	z.B. ONSEMI
T4	1	BC856BWT1G	BC856BW PNP general purpose transistor	SC-70_SOT323	z.B. ONSEMI
VAR1	3	CG0603MLC-12E	Chip Guard Varistor	R0603	Chip Guard Varistor Bourns
VAR2		CG0603MLC-12E	Chip Guard Varistor	R0603	Chip Guard Varistor Bourns
VAR3		CG0603MLC-12E	Chip Guard Varistor	R0603	Chip Guard Varistor Bourns
X1	1	Mini USB Connctor SMD	Mini USB Connctor SMD		Würth 650 005 161 21
LP1	1	PCB 27XX			Fa. Schwanz UL listed
<b>Rev.0:</b>		<b>01.12.2008</b>	<b>first initial version</b>		
<b>Rev.1:</b>		<b>19.02.2009</b>	<b>Added TPL555 Timer components</b>		
			<b>corrected count for R12/ 10R</b>		
<b>Rev.2:</b>		<b>25.02.2009</b>	<b>corrected the value of R58 from 3R3 to 1R8</b>		
<b>Rev.3:</b>		<b>06.04.2009</b>	<b>added D3</b>		
<b>Rev.4:</b>		<b>09.04.2009</b>	<b>set the antenna values to the intermediate ones</b>		
<b>Rev.5:</b>		<b>15.04.2009</b>	<b>changed the LED resistor values R53..R55</b>		
<b>Rev.6:</b>		<b>17.04.2009</b>	<b>corrected the values for the antenna R32, C47</b>		
<b>Rev.7:</b>		<b>07.05.2009</b>	<b>defined the PLCC Leds Osram</b>		
			<b>Changed the FE1 to a 1206 oR resistor</b>		
<b>Rev.8:</b>		<b>18.05.2009</b>	<b>defined R59 to be 0R</b>		