

	Document reference:		PCB reference:						
	STM32 BASED Handheld POS		STEVAL-IPC004V1						
	Company:								
	STMicroelectronics								
Category	S. No.	Reference Designator	Component Description	Package	Manufacturer	Manufacturer's ordering code / Orderable Part Number	Supplier	Supplier Ordering Code	Quantity
ST Devices	1	U10	STM8S103K3T6	LQFP32	ST	STM8S103K3T6TR			1
	2	U11	LD1117S33TR	SOT223	ST	LD1117S33TR			1
	3	U12	STLM20DD9F	UDFN4	ST	STLM20DD9F			1
	4	U13	STMP52151	SOT23-5L	ST	STMP52151			1
	5	U14	LD1117S50TR	SOT223	ST	LD1117S50TR			1
	6	U15	STT818B	SOT23-6L	ST	STT818B			1
	7	U16	USBLC6-2P6	SOT666	ST	USBLC6-2P6			1
	8	U17	ST8024CDR	S028	ST	ST8024CDR			1
	9	U18	L5987ATR	HSOP8	ST	L5987ATR			1
	10	U19	TL1431CD	SO-8	ST	TL1431CDT			1
	11	U20	STM1404ARNIQ6F	QFN16	ST	STM1404ARNIQ6F			1
	12	U21	STM32F107VCT6	LQFP100	ST	STM32F107VCT6TR			1
	13	U1	TS461CLT	SOT23-5L	ST	TS461CLT			1
	14	U2	M74HC245	TSSOP-20	ST	M74HC245			1
	15	U4	L293D	SO20	ST	L293DD			1
	16	Q1, Q2	STS5PF30L	SO8	ST	STS5PF30L			2
	17	Q3,Q4,Q5,Q6	2STR1215	SOT-23	ST	2STR1215			4
	18	D2,D6,D8	STP55L60	SMC	ST	STP55L60			3
	19	D7	BAT20JFILM	SOD-323	ST	BAT20JFILM			1
	20	D9,D10	1N5819	DO41	ST	1N5819			2
	21	D12,D14,D15	BAT54JFILM	SOD-323	ST	BAT54JFILM			3
NON ST Devices									
Crystal and Oscillator	22	Y1	32.768KHz	2-pin (Cylindrical)	Corporation	AB26T-32.768KHZ		535-9032-ND	1
	23	Y2	25MHz		Digikey	X1094-ND			1
Connectors and jumpers	24	J1	CON14_1.27mm pitch	1.27 mm X 14 (Axial)	Any				1
	25	J2	DFU_CON2	2.54 mm X 2(Axial)	Any				1
	26	J3	CON36	SMD 0.5mm X 36			Digikey	HFL136CT-ND	1
	27	J5	FMS205-HS	SMD 1MM x 30			Digikey	609-1169-1- ND	1

	28	J7	SWIM_CON4	SRCP 1,27 4 M 1 SMD 1 37 E1 094 GU-H * J 0	ERNI	284697			1
	29	J8	CON3	SMD 0.5mm X 3	Any				1
	30	J10	GPRS_CON6	Axial 2.54mm X 6	Any				1
	31	J11	SWD_CONN_STM32W		SAMTEC	FTSH-105-01-L-DV-K			1
	32	J12	SKT_PWR_2R0mm_4A_THRU_RA	Any					1
	33	J13	Magnetic Card	Axial 1.25mm X 9	Any				1
	34	J14	USB_MICRO-AB	Micro-USB AB			Digikey	WM17144CT- ND	1
	35	J15	RFID_CON4	Axial 2.54mm X 4	Any				1
	36	J16,J20	CLOSED	Axial 2.54mm X 2	Any				2
	37	J17,J18	OPEN	Axial 2.54mm X 2	Any				2
	38	J19	SMART CARD CONNECTOR				Mouser	611-CCM02- 2504LFTT30	1
	39	J21	CON10_1.27mm pitch	Axial 1.27 mm X 10	Any				1
LEDs	40	D3	POWER LED				Digikey	516-1311-ND	1
	41	D4	USB SMD LED				Digikey	516-1311-ND	1
	42	D1	USB POWER FAIL SMDLED				Digikey	516-1311-ND	1
Capacitors	43	C1,C9,C12,C13,C14,C17,C18,C21,C 22,C24,C25,C26,C27,C28,C29,C30, C43,C55,C56,C65,C66,C68,C75,C7 6,C77,C78,C79,C90	100nF	402			Mouser	810- CGA2B1X7R1C 104K	28
	44	C2,C16,C19	47uF	1206			Mouser	810- C3216X5R0J47 6M	3
	45	C3,C8,C11,C40,C41,C42,C44,C45,C 73,C91	10uF	1206			Mouser	81- GRM319C81C 106KA2D	10
	46	C4,C86,C88	4.7uF						3
	47	C5	4.7nF	402			Mouser	81- GRM15F51H4 72ZA01D	1
	48	C6,C7	15pF	402			Mouser	581- UQCL2A150JA T2A	2

								810- C1005X7R1C2 24K	
	49	C15	220nF	402			Mouser		1
	50	C20	4.7uF/10v						1
	51	C23	22uF				Mouser	81- GRM31CR61C 226KE5K	1
	52	C52	6.7nF	402			Digikey	445-4950-1- ND	1
	53	C71,C72	22pF	402			Mouser	810- CGA2B2C0G1 H220J	2
	54	C53	100pF	402			Mouser	810- CGA2B2C0G1 H101J	1
	55	C54	10uF/25V	1206			Digikey	587-1337-1- ND	1
	56	C57	220nF	402			Mouser	810- C1005X7R1C2 24K	1
	57	C58	47uF/10V						1
	58	C59	4.7nF	402			Mouser	810- CGA2B2X7R1H 472K	1
	59	C60	47uF/16V						1
	60	C64	100uF/16V						1
	61	C67	470nF	402			Mouser	81- GRM155F51C 474ZA1D	1
	62	C69,C70	10pF	402			Mouser	810- CGA2B2C0G1 H100D	2
	63	C74	10nF	402			Mouser	810- CGA2B2X8R1E 103K	1
	64	POT2,C84	NA						2
	65	C85	180pF	402					1
	66	C87	2.2uF	1206			Mouser	810- C3216X5R1A2 25M	1
	67	C89	47pF	402			Mouser	77- VJ0402A470K XXCBC	1

Inductors	68	L2	22uH/4A						1
	69	L3	68uH/1.5A				Digikey	587-2635-1-ND	1
	70	L4	10uH						1
Resistors	71	R1,R22,R97	680	402			Mouser	71-CRCW0402-680-E3	3
	72	R4,R27	47k	402			Mouser	660-RK73B1ETTP473J	2
	73	R9	180	402			Mouser	660-RK73H1ETTP1800F	1
	74	R11,R28,R43,R47,R105,R106,R127,R128	100k	402			Mouser	660-RK73B1ETTP104J	8
	75	R13,R25,R32,R33,R34,R48,R49,R53,R54,R56,R58,R59,R74,R79,R81,R85,R86,R89,R125	10k	402			Mouser	660-RK73H1ETTP1002F	20
	76	R14,R17,R26,R38,R39,R40,R57,R63,R64,R67,R72,R82,R121,R123	0	402			Digikey	RMCF0402ZT0R00CT-ND	14
	77	R15	27k	402			Mouser	71-CRCW040227K0FKED	1
	78	R20,R24	22	402			Mouser	660-RK73H1ETTP22R0F	2
	79	R21,R83,R122	1M						3
	80	R29,R80	22k	402			Mouser	660-RK73H1ETTP2202F	2
	81	R31, R76,R111,R112	4k7	402			Mouser	71-CRCW0402-4.7K-E3	4
	82	R37,R68	510						2
	83	R41,R42,R44	4.7k	402			Mouser	71-CRCW0402-4.7K-E3	3
	84	R45,R46,R51,R52	10K				Mouser	660-RK73H1ETTP1002F	4
	85	R50	200K	402			Mouser	71-CRCW0402J-200K-E3	1
	86	R60	2k2						1

	87	R61,R99,R110	100	402			Mouser	754-RR0510P-101D	3
	88	R73,R75,R101,R109	1k						4
	89	R76	4K7	402			Mouser	71-CRCW0402-4.7K-E3	1
	90	R77,R36, R55	DNM						3
	91	R84	470	402			Mouser	660-RK73H1ETTP4 700F	1
	92	R87	120	402					1
	93	R88	470	402			Mouser	660-RK73H1ETTP4 700F	1
	94	R90,R92	470E	402			Mouser	660-RK73H1ETTP4 700F	2
	95	R91	0.5E/1W/SENSE	1206			Mouser	66-LR1206-LF-R500-F	1
	96	R94,R95,R102,R103	5.1K(0.5%)				Mouser	71-CRCW0402-5.1K-E3	4
	97	R96	82k	402			Mouser	71-CRCW0402J-82K-E3	1
	98	R100	2.2k	402			Mouser	71-CRCW0402-2.2K-E3	1
	99	R104	18k	402			Mouser	71-CRCW0402-18K-E3	1
	100	R78	10k	402					1
	101	R107	15k	402			Mouser	660-RK73H1ETTP1 502F	1
Misc	102	MK1	MICROPHONE	DNM					1
	103	BT1	BATTERY	DNM					1
	104	BT2	3V_CR2032/F4N				Digikey	A99327CT-ND (Battery Holder) / P189-ND (Battery)	1
	105	BZ1	BUZZER						1
	106	U6	NAND512W3AN	TSOP48					1
	107	U7,U9	N25Q064A13EF840F	VDFPN8	Numonyx			N25Q064A13EF840F	2

	108	SW1	POWER SWITCH						1
	109	SW2	RESET						1
	110	TP1	AUX2						1
	111	TP2	AUX1						1
	112	TP3	MCO_T POINT						1
	113	1	ST_LOGO						1
	114	Flex Cable	Cable supporting 36 pin connector				Digikey	WM10229-ND	1
	115	USB Cable 1	CABLE USB-A TO MICRO USB-B 0.5M				Digikey	AE10418-ND	1
	116	USB Cable 2	CABLE MICRO USB ASTD A 0.075M				Digikey	H11576-ND	1
	Display and Keypad Daughter Board								
ST Devices	1	Q1	2STR1215	SOT-23	ST	2STR1215			1
	2	U1	M24LR64-RDW6T/2	TSSOP8	ST	M24LR64-RDW6T/2			1
Capacitors	3	C1,C2,C3,C4,C5,C6,C7,C8,C9	4.7uF						9
	4	C11, C12	22pF						1
	5	C10	100nF	402			Mouser	810- CGA2B1X7R1C 104K	1
Resistors	6	R14,R15	4.7k	402			Mouser	71-CRCW0402- 4.7K-E3	2
	7	R1,R2,R3,R4,R5,R6,R9,R10,R11	10k	402			Mouser	660- RK73H1ETTP1 002F	9
	8	R7	220						1
	9	R8	330						1
	10	R12	470E	402			Mouser	660- RK73H1ETTP4 700F	1
	11	R13	2K						1
Connectors	12	J1	CON28	SMD 0.8MM x 28					1
	13	J2	CON36				Digikey	HFL136CT-ND	1
	14	J3	CON2	PCB	Any				
	15	J4	CON12	PCB	Any				1
Misc	16	D1	LED BI-COLOUR				Digikey	P392-ND	1
	17	J4 (Matrix Keypad)	Keypad 4x4 Black	Keypad 4x4 Black	Futurelec				1
	18	1	ST_LOGO	PCB					1
	GSM Daughter Board BOM								

ST Devices	1	D1	STPS1L30	SOT-23	ST	STPS1L30			1
	2	Q1,Q2	2STR1215	SOT-23	ST	2STR1215			2
	3	U1	LD29300P2MTR	P2PAK/A	ST	LD29300P2MTR			1
	4	U2	ESDALC6V1W5	SOT323-5L	ST	ESDALC6V1W5			1
Resistors	5	R1,R2,R3	22E	402			Mouser	660-RK73H1ETTP22R0F	3
	6	R4	33k						1
	7	R5	15K	402			Mouser	660-RK73H1ETTP1502F	1
	8	R6,R11	4.7K	402			Mouser	71-CRCW0402-4.7K-E3	2
	9	R7,R13,R14,R16	0E	402			Digikey	RMCF0402ZT0R00CT-ND	4
	10	R8	300E	402					1
	11	R9,R12	47K	402			Mouser	660-RK73B1ETTP473J	2
	12	R10	100k	402			Mouser	660-RK73B1ETTP104J	1
	13	R15	DNM						1
Connectors	14	J1	C707 10M006 0492	SIM Card Connector			Digikey	361-1021-1-ND	1
	15	J2	SKT_PWR_2R0mm_4A_THRU_RA		Any				1
	16	J4	CON6	Axial 2.54MM X 6					1
	17	J5	CON3 (RCPT IPEX MHF)	Receptacle, Male Pins			Digikey	931-1107-1-ND	1
Capacitors	18	C1	10uF	1206			Mouser	81-GRM319C81C106KA2D	1
	19	C2,C5	100nF	402			Mouser	810-CGA2B1X7R1C104K	2
	20	C3,C4	100uF						2
	21	C6	100n	402			Mouser	810-CGA2B1X7R1C104K	1
Misc	22	BT1	DC-2R5E224U-E						1
	23	CONN1	SIM900D						1

							Dura Opto Technologi es	LED- CG170HRF- CTRed 0805	1
	24	D2	LED						
	25	SW1	SW PUSHBUTTON						1
	26	Antenna	ANT 5-BAND FLEX PCB W/CABLE				Digikey	931-1054-ND	1