

# STEVAL-IEG001V2

# BOM

Table 1. VTS BOM

<b>ST Devices</b>	1	U1	M24M01 - EEPROM	ST	M24M01HRMN6TP	1
	2	U5	STM32F207 - MCU	ST	STM32F207VCT6	1
	3	U6	LD29300P2MTR	ST	LD29300P2MTR	1
	4	U7	LD39150	ST	LD39150DT33-R	1
	5	U8	L4978	ST	L4978D013TR	1
	6	U10	STLDC08	ST	STLDC08PUR	1
	7	U11	L6924D	ST	L6924D	1
	8	U12	STTS751 TEMP. SENSOR	ST	STTS751-0WB3F	1
	9	U13	L3G20D GYRO	ST	L3G20D	1
	10	U14	LIS331DLH 3-axis Accelerometer	ST	LIS331DLH	1
	11	Q2	STS6NF20V	ST	STS6NF20V	1
	12	Q3,Q4	2STR1160 NPN transistor	ST	2STR1160	2
	13	Q6	2STR2160 PNP transistor	ST	2STR2160	1
	14	D3	STTH102	ST	STTH102A	1
	15	D4,D6,D7,D10,D11	STPS2L30A	ST	STPS2L30A	5
	16	D5	DNM			
	17	D1,D16	BAT54	ST	BAT54JFILM	2
<b>Other Devices</b>	18	U2	TFBS4711 serial infrared transceiver SIR	Digikey	751-1067-1-ND	1
	19	U3	LCD board connector	Digikey	SAM1067-50-ND	20
	20	U4	GPS Module	Telit	SL869	1
<b>Connectors/ Jumpers</b>	21	J1	uSD Connector	Digikey	HR1964CT-ND	1
	22	J2	GPS connector	Digikey	A97593-ND	1
	23	J3,J4	GSM connector	Mouser	649-77311-101-14LF	8
	24	J5	CAN_CONN	Mouser	649-77311-101-14LF	2
	25	J6	BAT_12V	Digikey	CP-042PJCT-ND	1
	26	J6	Power Connector	Mouser	173-23507-ST-EX	1
	27	J7	3.7V Li ion	Mouser	649-77311-101-14LF	2
	28	J8	SWD_CONN	Digikey	S9012E-05-ND	1
	29	GPS	GPS antenna	Mouser	814-637114	1
<b>Inductance</b>	30	L1	10uH	Digikey	490-1122-1-ND	1
	31	L2	47uH	Digikey	587-2083-1-ND	1
	32	L6	47uH	Mouser	963-NR8040T470M	1
	33	L5	100uH	Mouser	652-SRN8040-101M	1
	34	L7	35.5nH	Digikey	490-6580-1-ND	1
<b>Switches</b>	35	SW1,SW2,SW5	SW PUSH BUTTON	Mouser	858-SWT6-R4R	3
	36	SW3, SW4	TAMPER, RESET SWITCH	Farnell	9471898	2
<b>Diodes/LEDs</b>	37	D2	LED BI-COLOR	Digikey	67-1124-ND	1
	38	D8,D9	LED	Digikey	160-1176-1-ND	2
	39	D17,D18,D19	4148	Digikey	LL4148FSCT-ND	4
	40	D13	GREEN-LED	Digikey	160-1169-1-ND	1
	41	D14	YELLOW-LED	Digikey	160-1170-1-ND	1
	42	D15	DNM			

**Table 1. VTS BOM (continued)**

<b>Resistances</b>	43	R1, R5, R6, R15, R39, R40	100K	Digikey	P100KACT-ND	6
	44	R3, R4, R28, R35, R43, R60, R73, R74, R77, R79, R84, R88, R99	0E	Digikey	P0.0ACT-ND	13
	45	R7, R11, R68	47E	Digikey	P47ACT-ND	3
	46	R8, R9, R10, R44, R56, R59, R70	1K	Digikey	P1.0KACT-ND	7
	47	R12, R13, D12	220E	Digikey	P220CCT-ND	3
	48	R31, R75, R85, R89, R92, R97, R98, R100, R101, R102	10K	Digikey	P10KACT-ND	10
	49	R18, R19, R20, R21, R24, R27, R30, R38, R52, R53, R54, R62, R63, R71, R76, R78, R81, R82, R83, R86, R87, R76, R78, R81, R82, R83, R86, R87,	4.7K	Digikey	P4.7KACT-ND	22
	50	R22, R23, R32, R37	33E	Digikey	P33ACT-ND	4
	51	R25, R26, R33, R34	100E	Digikey	P100ACT-ND	4
	52	R45	1M	Digikey	P1.0MACT-ND	1
	53	R46, R48	15K	Digikey	P15KACT-ND	2
	54	R47	33K	Digikey	P33KACT-ND	1
	55	R49	20K	Digikey	P20KACT-ND	1
	56	R50, R57, R64	2K7	Digikey	P2.7KACT-ND	3
	57	R51	9K1	Digikey	P9.1KACT-ND	1
	58	R58	10E	Digikey	P10ACT-ND	1
	59	R61	0.03E	Digikey	P50NLCT-ND	1
	60	R65	27K	Digikey	P27KACT-ND	1
	61	R66, R72	12K	Digikey	P12KACT-ND	2
	62	R67	3.5K	Digikey	P3.48KCCT-ND	1
	63	R69	470E	Digikey	P470CCT-ND	1
	64	R93	2K2	Digikey	P2.2KACT-ND	1
	65	R90, R91, R95, R96	47K	Digikey	P47KACT-ND	4
	66	R2, R42, R36, R80, R29	DNM			
<b>Capacitors</b>	66	C1, C4	4.7uF	Digikey	478-1416-1-ND	2
	67	C2, C3, C5, C6, C9, C12, C13, C17, C18, C19, C22, C23, C24, C25, C26, C27, C33, C34, C35, C36, C37, C38, C42, C50, C56, C63, C66, C68, C70	100nF	Mouser	810-CGA4F2X7R1H104K	29
	68	C7	2.2uF	Digikey	PCE3169CT-ND	1
	69	C10, C11, C14, C15, C30, C31	22pF	Digikey	399-5568-1-ND	6
	70	C16	0.22F	Digikey	P14164CT-ND	1
	71	C8, C20, C32, C52, C65, C69	10uF	Digikey	PCC2403CT-ND	6
	72	C21, C59, C64	10nF	Digikey	587-1114-1-ND	3
	73	C28, C29	10pF	Digikey	478-1304-1-ND	2
	74	C39	100uF	Mouser	80-T491A107M004	1
	75	C40	220nF	Digikey	587-1287-1-ND	1
	76	C41	2.7nF	Digikey	399-1152-1-ND	1
	77	C43, C54	470uF/25V	Digikey	P5168-ND	2
	78	C44	220uF	Digikey	P12383-ND	1
	79	C51, C60	22nF	Digikey	587-1272-1-ND	2
	80	C55, C58, 61	1uF	Digikey	587-1283-1-ND	3
	81	C57	4.7uF/16V	Digikey	PCC2411CT-ND	1
	82	C62	1nF	Mouser	81-GRJ21AR72E102KWJD	1
	83	C67	470nF	Digikey	587-1282-1-ND	1
	84	C56, C73	DNM			
	85	C74, C75	27pF	Digikey	478-5017-2-ND	2
<b>Miscellaneous</b>	86	Y1	32.768 KHz crystal	Mouser	520-TFC3X8-X	1
	87	Y2	8 MHz	Digikey	XC1243CT-ND	1
	88	BZ1	Piezoelectric Buzzer	Mouser	810-PS1240P02BT	1
	89	F1	Fuse-R	Mouser	650-AHEF050	1
<b>Mounting Screws and Nuts</b>	90		Small Hemisphere Bumpers	Mouser	517-SJ-5003BK	3

**Table 1. VTS BOM (continued)**

STEVAL-IEG001V2_GSM/GPRS Daughter Card						
<b>ST Devices</b>	1	U1	Quad Transil ESD Protection Device	ST	ESDALC6V1W5	1
	2	Q1,Q2	DNM			
<b>Other Devices</b>	3	GSM module	SAGEM HiLo	SOANAR PTE. LTD.	Sagem-HILO	1
	4	GSM	RF ADAPTER CABLE SMA ST-F TO UFL 220MM	SOANAR PTE. LTD.	RFCABLE-SMA-F-STG-TO-UFL	1
	5	GSM	GSM QUAD BAND SMA MALE RIGHT ANGLE	SOANAR PTE. LTD.	GSM-BH014	1
<b>LEDs</b>	6	D1,D2	DNM			
<b>Switches</b>	7	SW1	push buttun	Farnell	9471898	1
<b>Connectors/ Jumpers</b>	8	J2	40-Pin SMD connector for SAGEM Module	SOANAR PTE. LTD.	M-54102-0403	1
	9	J3	SIM card connector	Digikey	361-1021-1-ND	1
	10	J7	SuperCap	Digikey	P14164CT-ND	1
	11	J9,J10	4-Pin Interface connector	Digikey	S7002-ND	8
<b>Resistances</b>	12	R7,R12,R38,R50	0E	Digikey	P0.0ACT-ND or equivalent	4
	13	R11,R13	DNM			
	14	R2,R9	DNM			
	15	R3,R10	DNM			
	16	R14	50K	Digikey	PLT0805-50KACT-ND	1
<b>Capacitors</b>	17	C1,C29	100nF	Mouser	810-CGA4F2X7R1H104K	2
	18	C2	100uF	Digikey	445-6007-1-ND	1
	19	C3,C5	10pF	Digikey	478-1304-1-ND	2
	20	C4	22pF	Digikey	478-1308-1-ND	1
	21	C6	33pF	Digikey	478-1310-1-ND	1
	22	C7	10nF	Mouser	810-C2012X7T2W103MST	1

STEVAL-IEG001V2_Display Daughter Card						
<b>Connectors/ Jumpers</b>	1	J1	LCD connector	Digikey	A100290CT-ND	1
	2	J2	LCD	Digikey	73-1284-ND or equivalent	1
	3	J3	LCD board connector	Digikey	A32916-ND	20
<b>Resistances</b>	4	R1,R2,R3,R4,R7,R9	DNM			
	5	R6	0E	Digikey	P0.0ACT-ND	1
	7	R5,R8	0	Digikey	P0.0ACT-ND	2
	8	R10	47	Digikey	P47ACT-ND	1
<b>Capacitors</b>	9	C1,C2,C3,C4	1uF	Digikey	587-1283-1-ND	4
	10	C5,C6,C7,C8,C9,C10,C11,C12	100nF	Mouser	810-CGA4F2X7R1H104K	8