

	Document reference: STM8L Based IR Thermometer			PCB reference: STEVAL-IME010V1			Date:	15th-APR-2014	
	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	U1	8-Bit Ultra-low-power MCU	LQFP48	ST	STM8L052C6T6	ST	STM8L052C6T6	1
	2	U2	4KBit Dual Interface EEPROM	SO8	ST	M24LR04E-RMN6T	ST	M24LR04E-RMN6T	1
Sensor	1	U3	IR Thermometer Sensor	TO-39	Melexis	MLX90615SSG-DAA-000-TU	Digikey	MLX90615SSG-DAA-000-TU-ND	1
Crystal and Oscillator	1	Y1	CRYSTAL 32.768KHZ 7PF	Through Hole	Abracon Corporation	AB26T-32.768KHZ	Digikey	535-9032-ND	1
Connectors and jumpers	1	J1	I2C Connector	Through Hole, 1x4 pin header, 2.54mm pitch					1
	2	J2	Dual EEPROM	Through Hole, 1x4 pin header, 2.54mm pitch					1
	3	J5	SWIM connector	Through Hole, 1x4 pin header, 2.54mm pitch					1
	4	J8	Battery Retainer	SMD	MPD	BK-883-TR	Digikey	BK-883CT-ND	1
Capacitors	1	C1,C4	Capacitor Ceramic 12PF 50V 5%	SMD0805	Kemet	C0805C120J5GACTU	Digikey	399-1110-1-ND	2
	2	C2,C3,C5,C7,C8,C9,C11,C13	Capacitor Ceramic 0.1UF 50V 5%	SMD0805	Kemet	C0805C104J5RACTU	Digikey	399-1171-1-ND	8
	3	C6,C10	Capacitor Ceramic 1UF 25V 5%	SMD0805	TDK Corporation	CC0805ZRY5V8BB105	Digikey	311-1358-1-ND	2
	4	C12	Capacitor Ceramic 30PF 50V 5%	SMD0805	Kemet	C0805C300J5GACTU	Digikey	399-9219-1-ND	1
Resistors	1	R1,R4	RES 10K OHM 1/8W 5%	SMD0805	Stackpole Electronics Inc	RMCF0805JT10K0	Digikey	RMCF0805JT10K0CT-ND	2
	2	R6	RES 1.0K OHM 1/8W 5%	SMD0805	Yageo	RC0805JR-071KL	Digikey	311-1.0KARCT-ND	1
	3	R7,R9,R10,R11,R12,R13	RES 4.7K OHM 1/8W 5%	SMD0805	Yageo	RC0805JR-074K7L	Digikey	311-4.7KARCT-ND	6

	4	R14,R15,R16,R17,R18, R19	RES 0.0 OHM 1/8W	SMD0805	Yageo	RC0805JR-070RL	Digikey	311-0.0ARCT-ND	7
Inductors	1	L1	10uH - Ferrite Bead	SMD0805	TDK Corporation	MLF1608E100M	Digikey	445-6245-1-ND	1
	2	L2	Inductor Power 4.7UH 20%	SMD1812	Bourns, Inc	SDR0604-4R7ML	Digikey	SDR0604-4R7MLCT-ND	1
Misc Components	1	SW1,SW2	Tactile switch	Tactile Switch, SPNO, Through Hole.	TE CONNECTIVITY	FSM4JSMATR	Digikey	450-1759-1-ND	2
	2	SW3	RESET SWITCH (0.05A, 12V)	Tactile Switch, SPNO, SMD. 6mmx3.5mm	MULTICOMP	DTSM-32S-B	Element14	9471898	1
	3	U4	Glass LCD GH08172T	Through Hole		GH08172			1
	4	LS1	BUZZER PIEZO 4KHZ 12.2MM PC MNT	Through Hole (Circular - 12.20mm Dia x 6.50mm H)	TDK Corporation	PS1240P02CT3	Digikey	445-5229-1-ND	1
	Notes :								
1	R18,R19- By Default only R18 is Mounted to power EEPROM from IO of MCU. User can mount R19 and remote R18 to power EEPROM by VDD.								
		This will have impact on power consumption							
2	Y1,C1,C4: RTC Crystal section		Initially LSI is used for RTC management. User can switch to LSE as well but it will increase current consumption.						
3	J2,R12,R13: Daughter board connector for Dual-Interface EEPROM								
4	J1, C12,R4 - Not Mounted.								
5	R14,R16 - To use IR Sensor MLX90614 (By Default : Not Mounted)								
6	R15,R17 - To use IR Sensor MLX90615 (By Default : Mounted)								
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