

	Document / Project reference: Matrix LED display Demonstration Board based on STM32F103VET6 With Audio Decoder		PCB reference: STEVAL-ILL033V1(Control Unit)			Date:	21/11/2011		
	Comp	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	TS4657/Audio DAC	QFN20	ST	TS46571QT			1
	2	U2	STM32F103VET6/Microcontroller	LQFP	ST	STM32F103VET6			1
	3	U3	ST485ABDR	SO8	ST	ST485ABDR			1
	4	U4	L9615D/CAN Transceiver	SO8	ST	L9615D			1
	5	U5	M25P128VMF6TP/SerialFlash	SO16	ST	M25P128VMF6TP			not mounted
	6	U6	SPZB260/Zigbee Moudule		ST	SPZB260			not mounted
	7	U7	TS2012/Audio Amplifier	QFN20	ST	TS20121QT			1
	8	U9	LD1086DT33TR/Voltage Regulator	DPAK	ST	LD1086DT33TR			1
	9	U10,U11	ST3232CDR/RS3232 Driver Receiver	SO 16	ST	ST3232CDR			2
	10	U12	STM1001RWX6F/Reset Ic	SOT23-3	ST	STM1001RWX6F			1
	11	U13	ESDAULC6-3BP6/USB Protection device	SOT-666	ST	ESDAULC6-3BP6			1
	12	U14	M24M01-HWMN6TP/EEPROM	SO8	ST	M24M01-HWMN6TP			not mounted
	13	Z1	STPS1L30A/Schottky Rectifier	SMA	ST	STPS1L30A			1
	14	D4	BAT45J/Diode	SOD-323	ST	BAT54JFILM			1
Crystal and Oscillator	15	Y1	32.768kHz	XTAL-3	ECS	ECS-327-18-9X	Mouser	520-ECS-3276- 18-9X	1
	16	Y2	8Mhz	XTAL-3	Fox	FOXSLF/080-20	Mouser	559-FOXSO80- 20-LF	1
Connectors and jumpers	17	USB CONN1	USB-B Type Mini Connector	SMD	Molex or equivalent	67503-1020	Mouser	538-67503-1020	1
	18	VB1	DB9 Connector/Female	through hole	Tyco Electronics or equivalent	5747844-4	Mouser	571-5747844-4	1
	19	VB2	DB9 Connector/Male	through hole	Tyco Electronics or equivalent	5747840-4	Mouser	571-5747840-4	1
	20	J1	LCD Connector and 16 x 2 alphanumeric LCD	16 x 1 Bergstrip	Oriole or equivalent	ODM16216-9SL3/AX	Oriole		1
	21	J2	LED Board connector	10 x 2 header	3M Electronic Solutions Division	30320-6002HB	Mouser	517-30320-6002	1
	22	J5	4 PIN Berg Strip	4 x 1 Bergstrip	Any		Samtec	TSW-150-32-G- S	1
	23	J6	7 PIN Berg Strip and Keypad	7 x1 pin Bergstrip	Any		Futurlec	KEYPAD3X4B	not mounted
	24	J8	8 pin header/zigbee header	8 pin header	Any				not mounted

	25	J13	Audio Jack	3 pin through hole	CUI or equivalent	SJ1-3523NG	Digikey	CP1-3523NG-ND	1
	26	J10	Jtag Connector	10 x 2 header	3M Electronic Solutions Division	30320-6002HB	Mouser	517-30320-6002	1
	27	J12	Berg Strip/Jumers	5 x 1Bergstrip	Any		Samtec	TSW-150-32-G-S	1
	28	J18	Screw type connector	through hole	Phoneix Contact or equivalent	1729131	Mouser	651-1729131	1
	29	CONN1	MMC card connector	smd	Proconn Technology	MSPN09-X0-1000			1
	30	J17	Screw type connector	through hole	Phoneix Contact or equivalent	1729128	Mouser	651-1729128	2
	31	J19	Berg Strip/Jumers	2x1 Bergstrip	Any		Samtec	TSW-150-32-G-S	1
LEDs	32	D1,D3,D5	LED-Red	LED-3mm	Everlight or equivalent	EL-204HT	Mouser	638-204HT	2
Capacitors	33	C1,C2	4.7nF	SMD0805	Panasonic - ECG or equivalent	ECJ-2VB1H472K	Digikey	PCC472BNTR-ND	2
	34	C3,C4,	10pF	SMD0805	Panasonic - ECG or equivalent	ECJ-2VC1H100D	Digikey	PCC100CNTR-ND	2
	35	C5,C6	20pF	SMD0805	Murata Electronics North America or equivalent	GQM2195C1H200JB01D	Digikey	490-3607-2-ND	2
	36	C7,C30	10nF	SMD0805	Panasonic - ECG or equivalent	ECJ-2VB1H103K	Digikey	PCC103BNTR-ND	2
	37	C8,C9,C10,C15,C16,C17,C18,C19,C20,C21,C22,C40,C41,C42,C46,C47,C48,C49,C51,C52,C53,C54,C55	100nF	SMD0805	Panasonic - ECG or equivalent	ECJ-2VB1E104K or equivalent	Digikey	PCC1828CT-ND	23
	38	C44,C45	10uF	Case A	Vishay/Sprague or equivalent	293D106X96R3A2TE3 or equivalent	Mouser	74-293D106X96R3A2TE3	6
	39	C23	.22F	Stacked Coin	Cornell Dubilier	EDLSD224H5R5C	Mouser	598-EDLSD224H5R5C	not mounted
	40	C43	100uF	through hole	TDK Corporation or equivalent	FK22X5R0J107M	Digikey	445-2902-ND	1
	41	C56,C57	15pF	SMD0805	Panasonic - ECG or equivalent	ECJ-2VC1H150J	Digikey	PCC150CNTR-ND	2
	42	C11,C14,C58	1uF	SMD0805	Panasonic - ECG or equivalent	ECJ-2VF1C105Z	Digikey	PCC1849CT-ND	3

	43	C12,C13,C59	2200pF	SMD0805	Panasonic - ECG or equivalent	ECJ-2VB1H222K	Digikey	PCC222BNCT-ND	3
	44	C60,C61,C62,C63	0.22uF	SMD0805	Panasonic - ECG or equivalent	ECJ-2VF1C224Z	Digikey	PCC1845CT-ND	4
	45	C64,C65,C66,C67	100pF	SMD0805	Panasonic - ECG or equivalent	ECJ-2VC1H101J	Digikey	PCC101CGCT-ND	4
Resistors	46	R1,R72	820	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ821V	Digikey	P820ACT-ND	2
	47	R2	3k5	SMD0805	Stackpole Electronics Inc or equivalent	RNC 20 T9 3.52K 0.1% R	digikey	RNC20T93.52K BR-ND	1
	48	R4,R5	22	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ220V	digikey	P22ATR-ND	2
	49	R6,R16	1M	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ105V	digikey	P1.0MATR-ND	2
	50	R7	100	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ101V	digikey	P100ATR-ND	1
	51	R8,R31,R33,R34,R35,R41,R66,R80	0	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEY0R00V	digikey	P0.0ATR-ND	8
	52	R10,R70,R71	4k7	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ472V	digikey	P4.7KATR-ND	3
	53	R11,R12,R13,R14,R17,R20,R21,R27,R30,R37,R38,R48,R49,R50,R51,R52,R53,R60,R61,R62,R68,R69,R73,R74,R75,R76,R77,R78,R79	10k	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ103V	digikey	P10KACT-ND	29
	54	R24	10k/ Resistor bank(9 PIN)	SIP9	BI Technologies or equivalent	L091C103LF	Mouser	858-L091C103LF	1
	55	R15,R57	470	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ471V	digikey	P470ATR-ND	2
	56	R22	1k	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ102V	digikey	P1.0KATR-ND	1
	57	R64,R65	499	SMD0805	Panasonic - ECG or equivalent	ERJ-6ENF4990V	digikey	P499CTR-ND	4
	58	R25,R29	22k	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ223V	Digikey	P22KACT-ND	2

	59	R26,R63	120	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ121V	digkey	P120ATR-ND	2
	60	R28	1.5k	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ152V	digkey	P1.5KATR-ND	1
	61	R32,R36	510	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ511V	digkey	P510ATR-ND	2
	62	R3,R9,R18,R19,R23	100k	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ104V	Digikey	P100KACT-ND	5
	63	R54,R55,R56,R58,R59,R67	330E	SMD0805	Panasonic - ECG or equivalent	ERJ-6GEYJ331V	digkey	P330ATR-ND	6
Inductor	64	L1,L2,L3,L4	220Ohm/2Amp/100MHz	SMD0603	Murata Electronics North America	BLM18EG221SN1D	Digikey	490-3992-1-ND	4
Misc Components	65	SW1	Push Button RESET switch	through hole	E-Switch or equivalent	TL1105F250Q	Mouser	612-TL1105-250	1
	66	SW2	DIP 8 switch	through hole	C&K Components or equivalent	BD08	Mouser	611-BD08	1
	67	JS1	Mini Din/key board connector	through hole	Kobiconn or equivalent	161-2306	Mouser	161-2306	1
	68	F1	1 amp Fuse connector + Fuse	through hole	Keystone Electronics or equivalent	0217.500HXP + 4527K-ND	Mouser	576-0217.500HXP + 534-4527K-ND	1