

Date: 10-Apr-08

Document reference: front panel based on STFPC311	PCB reference:STEVAL-CBP004V1
Company: STMicroelectronics	

Designator	Quantity	Reference	Value / Generic Part Number	Package	Manufacturer	Manufacturer's ordering code / Orderable Part Number	Supplier	Supplier's ordering code
U3	1	Microcontroller	ST72F264G2M6	SO-28	ST	ST72F264G2M6		
U4	1	Front panel controller/driver	STFPC311BTR	PQFP-52	ST	STFPC311BTR		
U5	1	Hex schmitt inverter	74VHC14MTR	SOP	ST	74VHC14MTR		
U2	1	Single 2-input NOR gate	74V1G02STR	SOT23-5L	ST	74V1G02STR		
U6	1	Serial access Real-Time Clock with alarm	M41T81M6E	SO8	ST	M41T81M6E		
U1	1	voltage regulators	KF33BD-TR	SO8	ST	KF33BD-TR		
VFD	1	Vaccum Fluorescent Display	FUTABA-11-MT-141NK	Through Hole	FUTABA	FUTABA -11-MT -141NK		
ZD1	1	Zener Diode	BZX79C6V2	Through Hole			Any	BZX796V2
D1,D2,D3,D4,D5,D6,D7	7	Schottky barrier diodes	1N5817	DO41	ST	1N5817		
IR1	1	IR Receiver	TSOP31236	Through Hole	VISHAY	TSOP31236		
IR	1	LED 3mm(BLUE)	LED	Through Hole			Farnell or Equiv.	325-4616
STBY	1	LED 3mm(RED)	LED	Through Hole			Farnell or Equiv.	322-544
MUTE	1	LED 3mm(GREEN)	LED	Through Hole			Farnell or Equiv.	322-570
Q3,Q5,Q7	3	NPN POWER TRANSISTORS	2STN1360	SOT-223	ST	2STN1360		
Q4	1	MEDIUM CURRENT HIGH PERFORMANCE LOW VOLTAGE PNP TRANSISTOR+D56	STD790AT4	DPAK(TO-252)	ST	STD790AT4		
Q6	1	LOW VOLTAGE FAST-SWITCHING HIGH GAIN PNP POWER TRANSISTOR	2STR2215	SOT-23	ST	2STR2215		
CON1	1	Power connector		7 way connector			RS or equivalent	483-8512
Y1	1	Crystal for STFPC311 -32.768KHz	32.768kHz	SMD			RS or equivalent	244-2018
XT1	1	Crystal for ST72F264G2M6 - 8MHz	8MHz	SS4			Jauch Quartz	Q 8.0-SS4-25-30/30
BT1	1	Maxell CR2032 micro Lithium Battery (3.0 V)	CR2032	Micro Lithium Cell	Maxell		Maxell	CR2032
BZ1	1	DC-BUZZER			Velleman Inc		Farnell or Equiv.	926-875
J1	1	ICC Jumper	SIP-2 (berg strip)				Any	
JP1	1	Signal and Power Headers	SIP-8 (berg strip)				Any	
JP2	1	RTC signal headers	SIP-3 (berg strip)				Any	
JP3	1	ICC Connector		Header 5x2/IDC-10B			Farnell or Equiv.	1106782
S2	1	negative	Push-button Switches	4-leg Through-hole (Push-4)			Farnell or Equiv.	535-916
S3	1	positive	Push-button Switches	4-leg Through-hole (Push-4)			Farnell or Equiv.	535-916
S4	1	MENU/SET	Push-button Switches	4-leg Through-hole (Push-4)			Farnell or Equiv.	535-916
S5	1	UP	Push-button Switches	4-leg Through-hole (Push-4)			Farnell or Equiv.	535-916
S6	1	DOWN	Push-button Switches	4-leg Through-hole (Push-4)			Farnell or Equiv.	535-916

S7	1	NEXT/FF	Push-button Switches	4-leg Through-hole (Push-4)		Farnell or Equiv.	535-916
S8	1	PREV/RR	Push-button Switches	4-leg Through-hole (Push-4)		Farnell or Equiv.	535-916
S9	1	STOP	Push-button Switches	4-leg Through-hole (Push-4)		Farnell or Equiv.	535-916
S10	1	OPEN/CLOSE	Push-button Switches	4-leg Through-hole (Push-4)		Farnell or Equiv.	535-916
S11	1	PLAY/PAUSE	Push-button Switches	4-leg Through-hole (Push-4)		Farnell or Equiv.	535-916
S12	1	STANDBY	Push-button Switches	4-leg Through-hole (Push-4)		Farnell or Equiv.	535-916
S1	1	BUZZ	Push-button Switches	4-leg Through-hole (Push-4)		Farnell or Equiv.	535-916
R10,R11	2	Resistance	10	805		Any	
R18	1	Resistance	100	805		Any	
R3,R5,R9	3	Resistance	220	805		Any	
R22	1	Resistance	330	805		Any	
R21	1	Resistance	470	805		Any	
R1	1	Resistance	3k3	805		Any	
R17,R20,R28, R29,R30	5	Resistance	4k7	805		Any	
R13,R14,R15, R16,R24,R25	6	Resistance	10k	805		Any	
R4,R7,R8,R12, R19,R27	6	Resistance	18k	805		Any	
R26	1	Resistance	33k	805		Any	
R2,R6,R23	3	Resistance	ik	805		Any	
C7,C12,C14,	3	Capacitor	10pF	805		Any	
C1,C2	2	Capacitor	30pF	805		Any	
C8	1	Capacitor	10nF	805		Any	
C4,C6,C9,C15, C17,C19,C21	7	Capacitor	100nF	805		Any	
C22,C5	2	Capacitor	0.1uF	805		Any	
C3	1	Capacitor(electrolytic)	2.2uF	SMD		Any	
C11,C16,C18	3	Capacitor(electrolytic)	10uF	SMD		Any	
C10	1	Capacitor(electrolytic)	100uF/50V	Through Hole		Any	
C20	1	Capacitor(electrolytic)	10uF/50V	Through Hole		Any	
C13	1	Capacitor(electrolytic)	10uF/16V	SMD		Any	