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STM32 Discovery-F4 BaseBoard1 (STM32-F4B1)					Copyright 2012 BusBoard Prototype Systems Ltd.			
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Rev.	Date	Who	Description					
1.00	15-Feb-2013	Scot Kornak	Created for STM32-F4B1 (PCA-640-1.00).					
Qty	Reference	KT Part#	Value	Rating	Description (dimensions in mils, 0.001")	Manufacturer	Man. #	SMT?
1	C6	C1-5/477	470u	16V	Cap, Elec. 470uF, 16V, 20%, -55to105C, Radial, 400d, 200sp, 492h, TH	Panasonic	EEU-FC1C471	No
2	C7-8	C2-1/103	10n	50V	Capacitor, 10nF, X7R, 50V, 10%, 0805	Kemet	C0805C103K5RACTU	Yes
2	C1, C5	C2-1/104	100n	50V	Capacitor, 100nF, X7R, 50V, 10%, 0805	Kemet	C0805C104K5RACTU	Yes
1	C2	C2-100/106	10uT	10V	Capacitor, Tantalum, 10uF, 10V, 20%, SIZEA 3216	Kemet	T491A106M010AT	Yes
3	DS1-3	DS1-3/G	Green		LED, Green, Diffused, T1-3/4, TH	LiteOn	LT1-4233	No
1	J27	J1-62			Connector, DC Power Coaxial, 2.1mm pin, RA, TH	CUI Stack	PB-002A	No
2	J24-25	J1-5/2	2pin		Connector, MTA-100, 2 pin, Male, Vertical, 100sp	Tyco	640456-2	No
6	J3 J6 J9-11 J22	J1-5/4	4pin		Connector, MTA-100, Male, 4-pin, Vertical, 100sp	Tyco	640456-4	No
1	J26	J1-7/20	20pin		Header, DIL, 10x2 pin, Male, Polarized, Shrouded, Vertical, 100sp, TH	FCI	75869-104LF	No
1	JU7	J1-90/2	2pin		Header, SIL, 2x1 pin, 100sp, 330h, Gold Flash, TH	Tyco	103185-2	No
2	JU38-39	J1-90/3	3pin		Header, SIL, 3x1 pin, 100sp, 330h, Gold Flash, TH	Tyco	103185-3	No
2	JU1+JU2, JU4+JU5	J1-90/4	4pin		Header, SIL, 4x1 pin, 100sp, 330h, Gold Flash, TH	Tyco	103185-4	No
1	JU42+JU43+JU44	J1-90/6	6pin		Header, SIL, 1x6 pin, 100sp, 330h, Gold Flash, TH	Tyco	103185-6	No
10	J12-21	J1-91/16	16pin		Header, DIL, 8x2, 100sp, 330h, Gold Flash, TH	Tyco	103186-8	No
2	CB1-2	J1-96/10	10pin		Socket, SIL, 10x1, 100sp, 340h, Gold, TH	Tyco	5-534237-8	No
5	AS11-2	J1-96/28	28pin		Socket, SIL, 28x1, 100sp, 340h, Gold, TH	Tyco		No
2	P1-2	J1-97/50	50pin		Socket, DIL, 25x2, 100sp, 340h, Gold, TH	Tyco	7-534998-5	No
1	J31	J2-5			Connector, Secure Digital Card, Top Mount, RA, SMT	Alternate Samtec	SSW-125-06-L-D	No
8	JU1, JU2, JU4, JU5, JU7, JU42, JU43, JU44	P-64			Jumper Shunt, Black, With Handle, 100sp, Gold	Hirose	DM1AA-SF-PEJ(21)	Yes
1	L1	L2-23/103	10uH	140mA	Inductor, Power, 20%, 1210	Panasonic	ELJFA100KF	Yes
2	L2-3	L2-36/102	1k@100MHz	0A5	Ferrite Bead, 1000R@100MHz, DCR=0R3, 500mA, 0805	TDK	MMZ2012R102A	Yes
1	PCB	PCB-640-1.00	4-layer		PCB, STM32F4B1, 160mm x 160mm, 4-Layer, E.N.I.G. (Ni/Au)	Kornak Tech	PCB-640-1.00	-
1	PCA1	PCA-32/F4			PCA, STMicro DiscoveryF4 Board with STM32F407VTG6, 100pin	STMicro	STM32F4DISCOVERY	
1	Q1	Q2-1	Ic=600mA	Vce=40V	Transistor, MMBT4401, NPN, SOT23	OnSemi	MMBT4401LT1G	Yes
1	Q2	Q2-7	130mA	50V	Transistor, BSS84, P-FET, 130mA, 50V, Rds=10, SOT23	OnSemi	BSS84LT1G	Yes
1	R13	R2-1/000	0R	1/10W	Resistor, 0R, 5%, 1/10W, 0805	Yageo	RC0805JR-070RL	Yes
10	R1 R4 R7 R10-12 R15 R20-22	R2-1/102	1K	1/10W	Resistor, 1K, 5%, 1/10W, 0805	Yageo	RC0805JR-071KL	Yes
9	R2-3 R5-6 R8-9 R17-18 R28	R2-1/103	10K	1/10W	Resistor, 10K, 5%, 1/10W, 0805	Yageo	RC0805JR-0710KL	Yes
1	R19	R2-1/104	100K	1/10W	Resistor, 100K, 5%, 1/10W, 0805	Yageo	RC0805JR-07100KL	Yes
2	R14 R16	R2-1/221	220R	1/10W	Resistor, 220R, 5%, 1/10W, 0805	Yageo	RC0805JR-07220RL	Yes
1	R23	R2-1/331	330R	1/10W	Resistor, 330R, 5%, 1/10W, 0805	Yageo	RC0805JR-07330RL	Yes
2	R24-25	R2-64/103	10k	1/16W	Resistor Array, 10k, 5%, 1/16W, Isolated, Convex, 4x0603, SMT	Panasonic	EXB-38V103JV	Yes
2	R26-27	R2-64/220	22R	1/16W	Resistor Array, 22R, 5%, 1/16W, Isolated, Convex, 4x0603, SMT	Panasonic	EXB-38V220JV	Yes
1	CB1	PCA-7780			DCE, DB9F, ComBoard UART Module, SIP10, With LEDs	BPS	CB-232F2	No

1	CB2	PCA-7782			DTE, DB9M, ComBoard UART Module, SIP10, With LEDs	BPS	CB-232M2	No
4	CB1, CB2	H1-410/1000	1.00"		Screw, Philips, #4-40, Pan Head, L=1.00", Steel-Zinc	Spanauer		No
4	CB1, CB2	H1-416			Nut, #4-40, od=3/16", Steel-Zinc	Spanauer	HN-201	No
4	CB1, CB2	H1-402			Washer, Flat, #4, id=1/8", od=5/16", thick=0.032", SS	Spanauer	W-2019	No
4	CB1, CB2	H1-403			Split Washer, #4, od=0.040", thick=0.031", Steel-Zinc	Spanauer	W-309	No
4	CB1, CB2	H-6/438			Spacer, Nylon, 478h (7/16"), #4 Unthreaded, 125id, 188od (3/16")	Bivar	9908-437	No
4	PCB	H-4/CLR			Adhesive Foot, Round, Flat, 500w, 140h, Clear	3M	SJ-5312	No
Optional Parts, Not Installed								
1	BT2	BT-21	CR2032	3V	Battery Holder, 2032 Coin Cell, Single, Horizontal, Low Profile, SMT	Keystone	1060	No
1	BT1	BT-20	CR2032	3V	Battery Holder, 2032 Coin Cell, Single, Horizontal, Low Profile, TH	Keystone	1059	No
1	BT1	BT-x	CR2032	3V	Battery, 2032 Coin Cell			No
1	J28	J1-88/2			Terminal Block, 1x2, Removable, Side Panels, 5mm-sp, RA, TH	Phoenix Contact	1757475	No
2	J4-5	J1-7/10			Connector, DIL, 2x5 pin, Male, Polarized, Vertical			No
1	J29	J1-25			Ground Bar, 2 pin, 300sp			No
1	J30	J1-5/2			Connector, MTA-100, 2 pin, Male, Vertical, 100sp	Tyco	640456-2	No
37	JU3, JU6, JU8-37 JU40-JU41	J1-90/2	2pin		Header, SIL, 1x2 pin, 100sp, 330h, Gold Flash, TH	Tyco	103185-2	No
2	J1-2	J1-5/4			Connector, MTA-100, Male, 4-pin, Vertical, 100sp	Tyco	640456-4	No
1	J23	J1-126/10	10pin		Header, DIL, 2x5, 50sp (1.27mm), Gold Flash, TH			No
1	Y1	Y2-6/32K768	32K768		Crystal, 32.768kHz, CL=18pF, -40to85C, SMT3.2x1.5x0.8mm	Epson	FC-135 32.7680KA-A3	Yes
2	C3-4	C2-2/180	18p	50V	Capacitor, 18pF, C0G, 50V, 5%, 0805			Yes