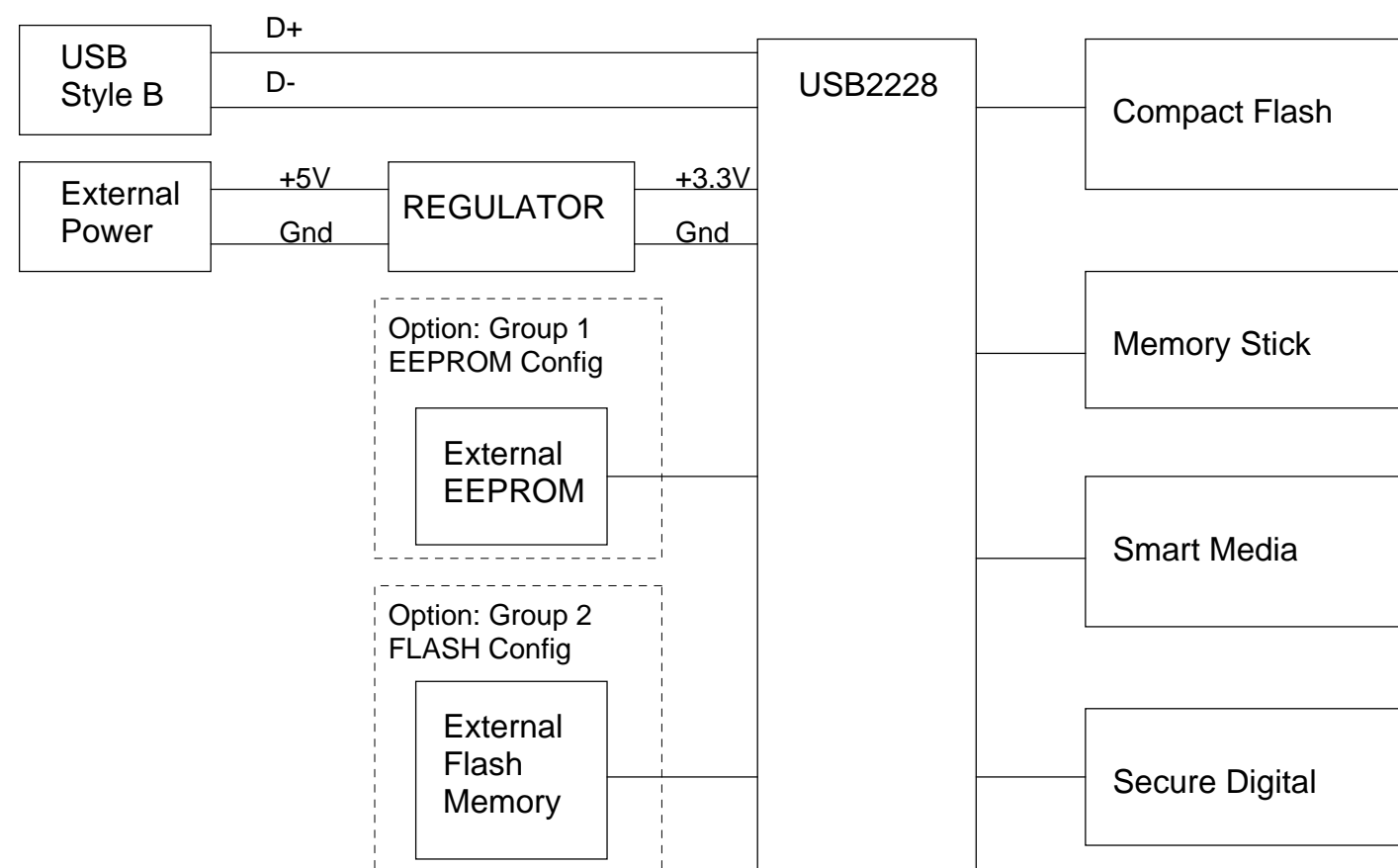


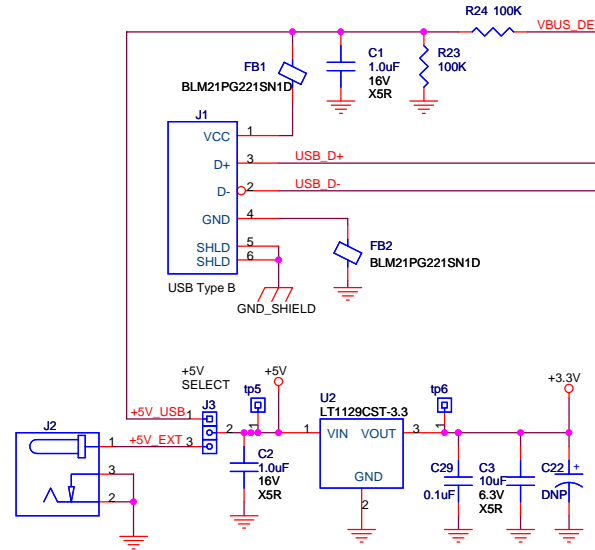
EVB-USB2228-CRB

Evaluation Board for USB2228, 2 Layers



Revision History

Revision	Date	Revision Summary	Author
0.1	07/14/2004	Initial schematic	Hans Magnusson
0.2	07/15/2004	Added power jack w/ regulator and USB connector, replaced 100K ohm RN with discretes, replaced bussed 100K ohm RN with 2x4 element RNs, changed 12MHz crystal to 24MHz, changed 33uF tant with 10uF ceramic on VDDIO33, added sockets for flash and EEPROM, added series 10k to SD_DET, added 2.2k pd on SM_PWR for spec. 1.20. Still needs a confirmation of I/O connector P/Ns.	C. Johnson
0.3	07/16/2004	Removed socket for EEPROM, updated population notes for Groups 1&2, changed label at LED2 to read "Power", connected all connector "SHIELD" pins to GND_SHIELD, renumbered the schematic.	C. Johnson
0.4	07/19/2004	Removed LED2 to prevent excess current draw during bus-powered mode, added DNP 33uF cap footprint to VDDIO to allow a large bulk cap if needed.	C. Johnson
0.5	07/20/2004	Changed CF and SD connectors to reverse-pinout/bottom mount versions, changed SD and MS connectors to more available P/Ns, corrected VCC connection to FLASH, updated the option descriptions on page 2, removed unneeded MD pull-up resistors, added optional timing cap to CF_PWR FET gate, added bypass cap for XD connector pwr pin, tied sWP- to GND, changed input cap for regulator to 1uF, connected +5V_USB to VBUS_DET, changed USB2228 reset cap to 0.1uF and resistor to 100k, added 10pF caps to clock lines, added jumper for ROMEN, pull-up x/CD0 to SM_PWR, pull-up SD_nWP to SD_PWR.	C. Johnson
0.6	08/10/2004	Added 1M ohm bleeder resistors to MS_PWR and SD_PWR.	C. Johnson
0.7	09/20/2004	Made the xD resistors DNP, added a note to explain the change. Changed the doc. number from EV-USB2228 to EVB-USB2228-2L. Replaced Q1 with FDN304P.	C. Johnson
A	09/21/2004	Released	C. Johnson
A1	11/15/2004	Refine DNP options	C. Johnson
B	11/16/2004	Refine bypass requirements.	C. Johnson
B.1	12/10/2004	Corrected the polarity of the WP pin on SD Socket, J8.	C. Johnson



Embedded card reader with USB2228. Supports Compact Flash, Smart Media, Memory Stick, Secure Digital and xD Picture cards.

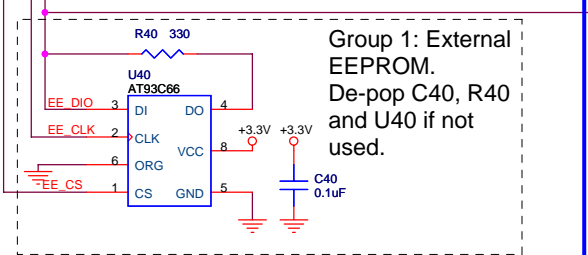
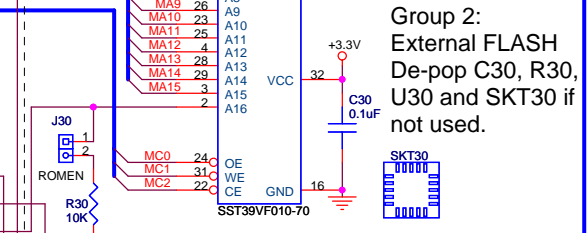
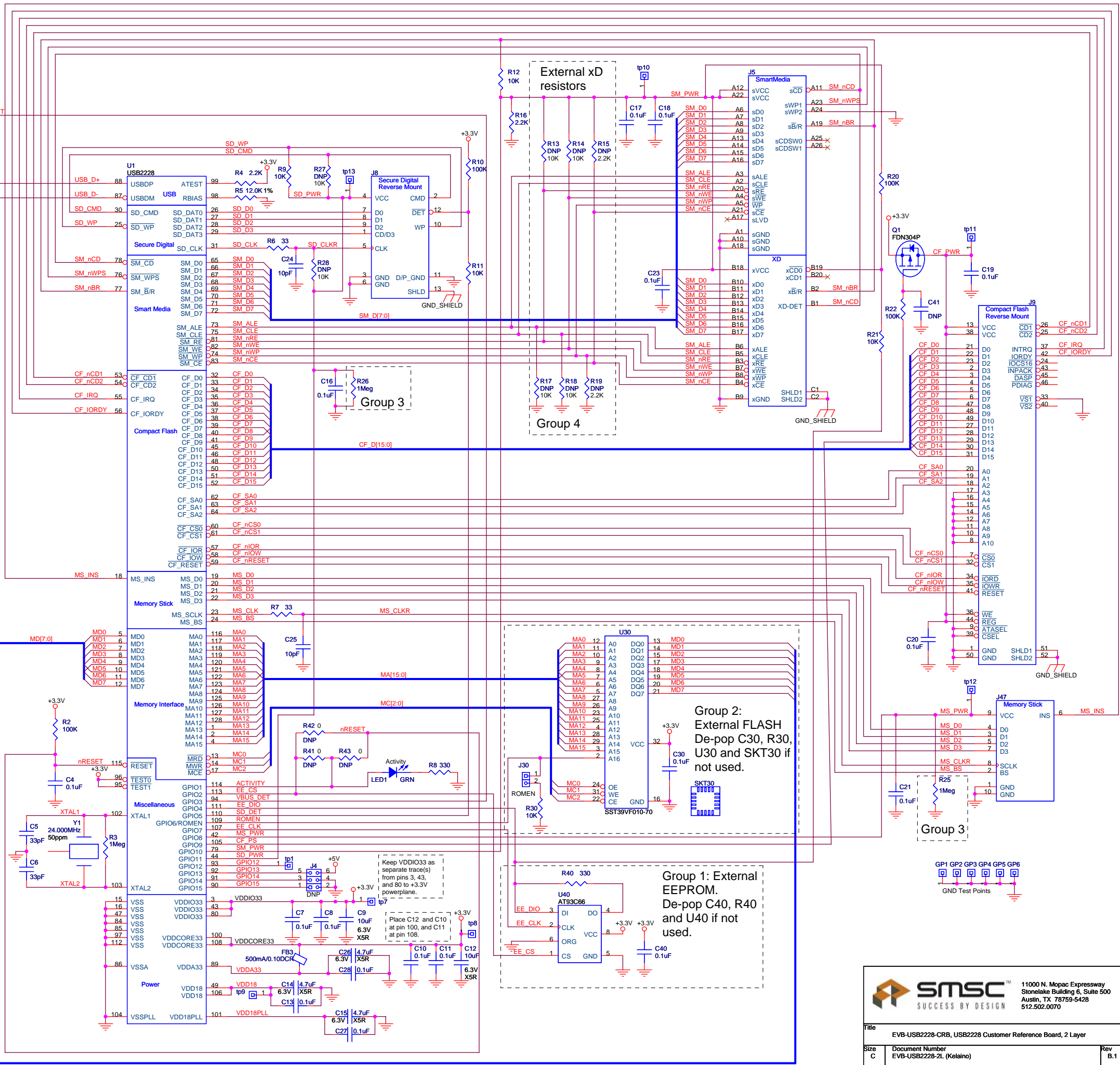
Options-

- 1) Group 1 and 2 not populated:
Firmware in Internal ROM
No unique serial number
- 2) Group 1 populated:
Firmware in Internal ROM
Unique serial number and configuration in EEPROM
- 3) Group 2 populated:
Firmware in External FLASH
Unique serial number and configuration in FLASH
- 4) Group 3 populated:
Revision A1 or earlier is used. Do not populate for later revisions.

Notes:

A) Group 4 is not populated. These resistors are replaced with internal resistors within the USB2228. These resistors are recommended, but are not required for xD compliance.

B) xD functionality is not available when using the USB2227 device (U1).



Title: EVB-USB2228-CRB, USB2228 Customer Reference Board, 2 Layer			
Size C	Document Number: EVB-USB2228-2L (Kelaino)	Rev B.1	
Date: Monday, December 06, 2004	Sheet 2	of 2	