



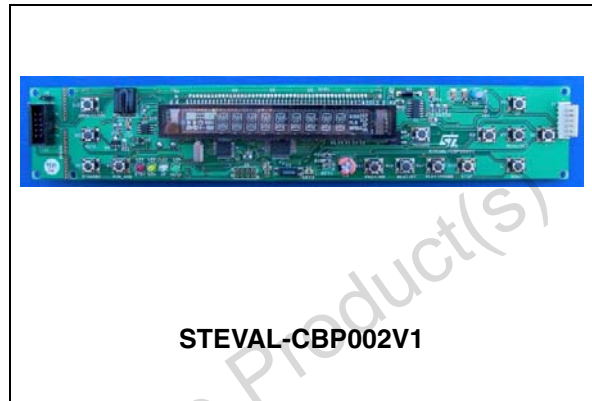
STEVAL-CBP002V1

VFD display controller with power management RTC and other front panel control/display functions using the STFPC320

Data Brief

Features

- 16-segment, 11-digit customized VFD for DVD recorder
- 14 front panel keys
- 4 LEDs (red for standby, yellow for schedule, blue for IR and green for mute)
- 1 IR sensor for remote control operation
- Buzzer on the board for mute feature demonstration
- RTC (real-time clock) to set the timer and alarm for wakeup
- On-board I²C EEPROM for time logging for automatic operations
- Power supply connector for four power supplies (3.3 V, 12 V, -30 V and GND)
- Standby management for low power operation
- Auto wakeup feature from system standby
- Embedded in-circuit programming capability



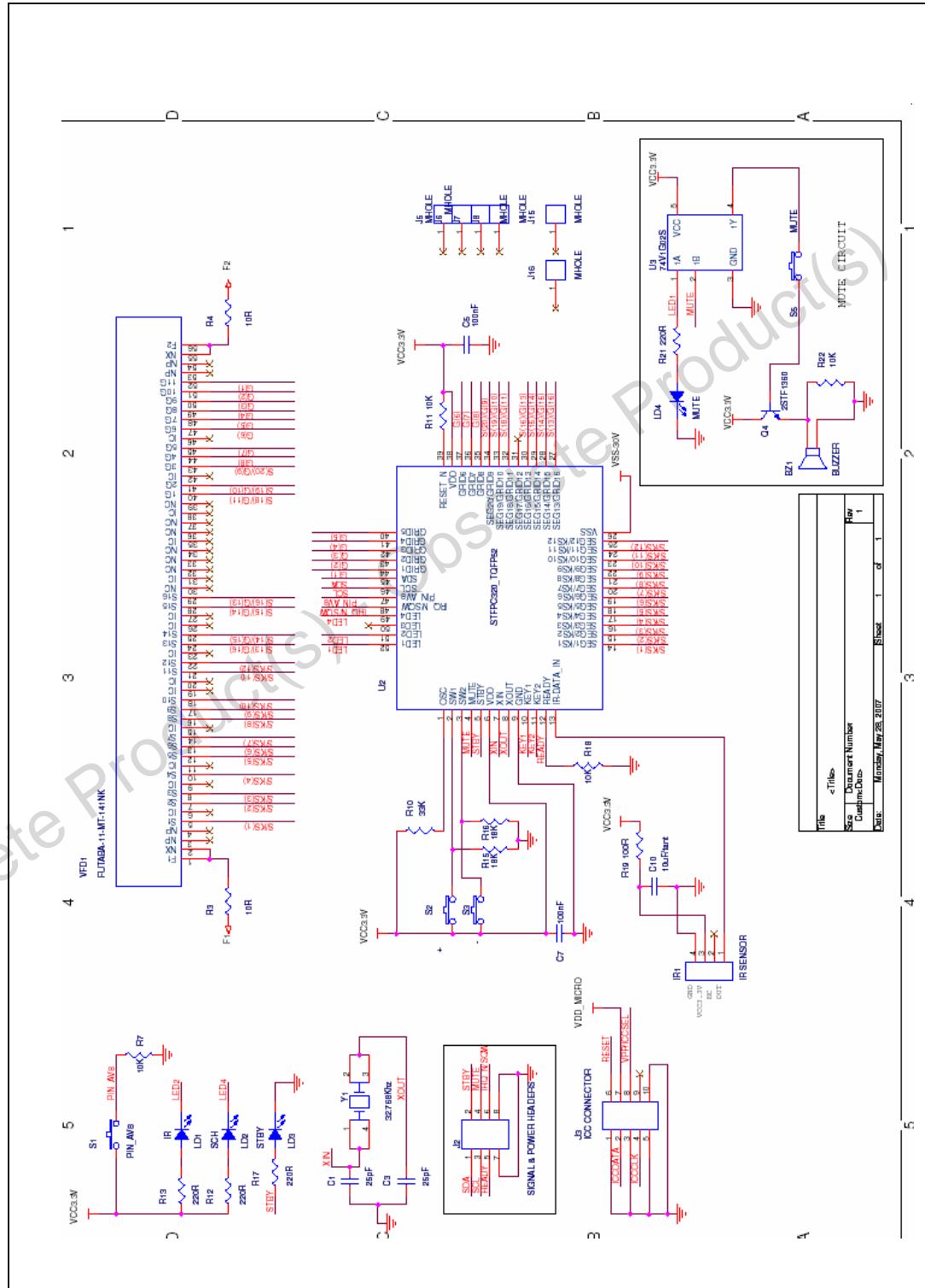
time clock in the STFPC320 for auto wake-up and setting the recording start and end time.

Description

This is a demonstration board based on the STFPC320 which consists of the front panel controller STFPC320 and microcontroller ST72F325 as I²C master. The basic idea is to develop a front panel for a DVD recorder which is very close to the available solutions in the market. The objective of this demonstration board is to display the capabilities of ST's front panel controller/driver STFPC320 to fit the market segment for front panels of DVD players, DVD recorders, VCRs, home theater systems with clock feature, HTiB (home theater in a box), personal video recorders (PVRs), set-top boxes and other applications that require a compact, integrated solution, while keeping system cost as low as possible. The design focus of this system is on 2 key areas: a standby management feature for low power consumption and an embedded real-

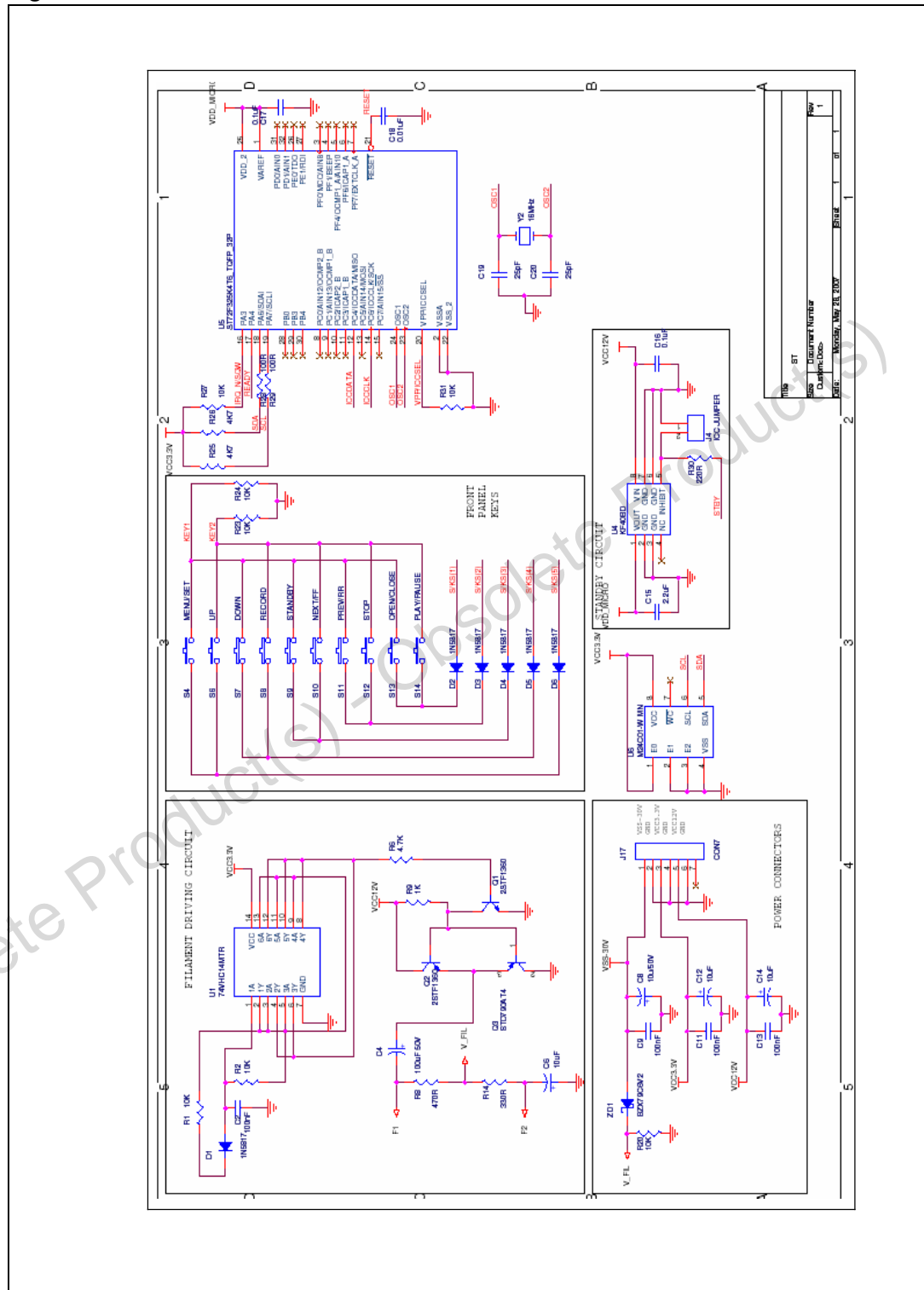
1 Board schematic

Figure 1. Schematic 1/2



File	<Title>
Size	Document Number
Created	DocuPrint-0000
Date	Monday, May 28, 2007
Sheet	1 of 1

Figure 2. Schematic 2/2



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
21-Aug-2008	1	Initial release.

Obsolete Product(s) - Obsolete Product(s)

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY AN AUTHORIZED ST REPRESENTATIVE, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2008 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com