



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

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-



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

1 Board schematic

Figure 1. Schematic 1/2

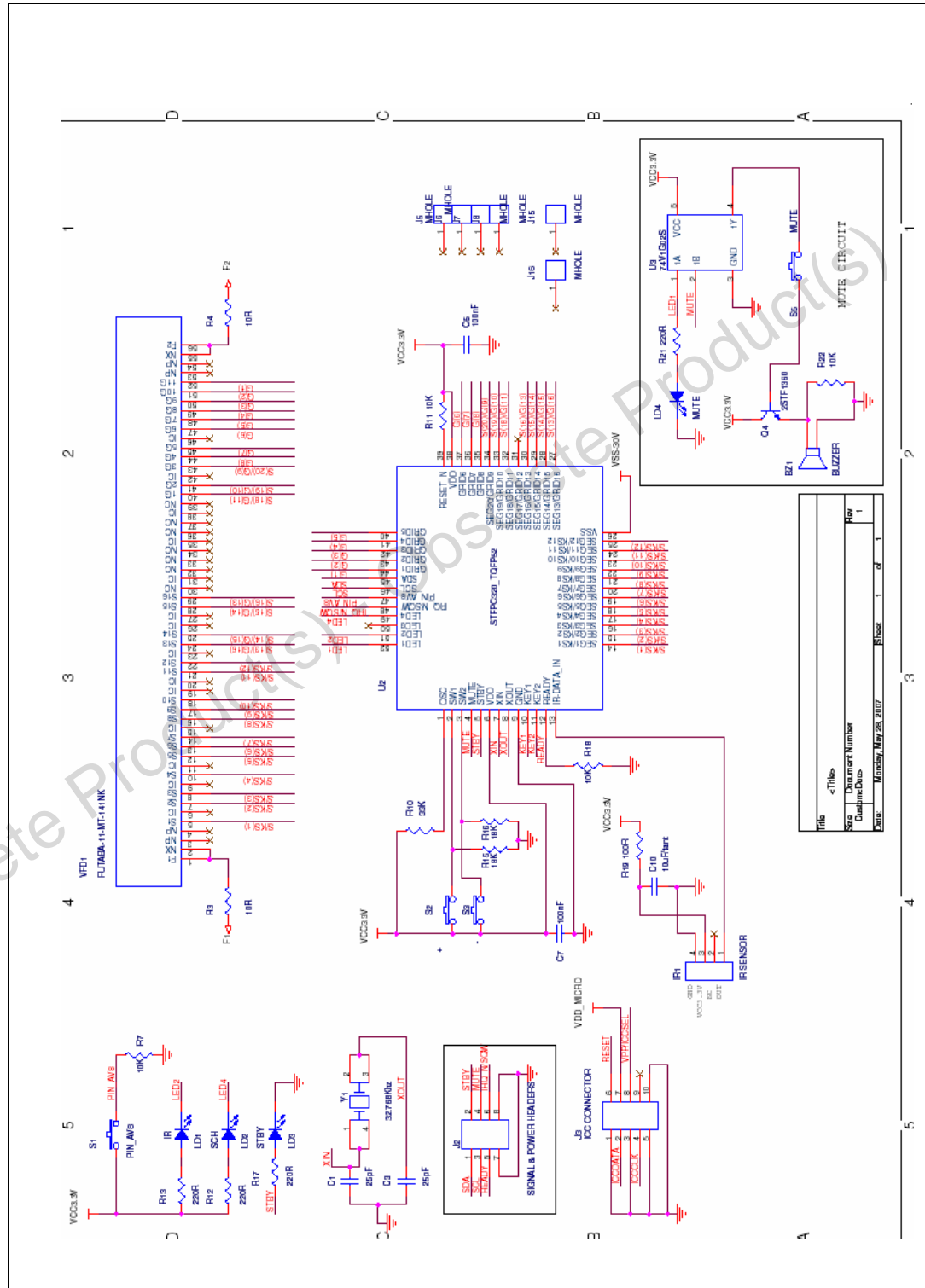
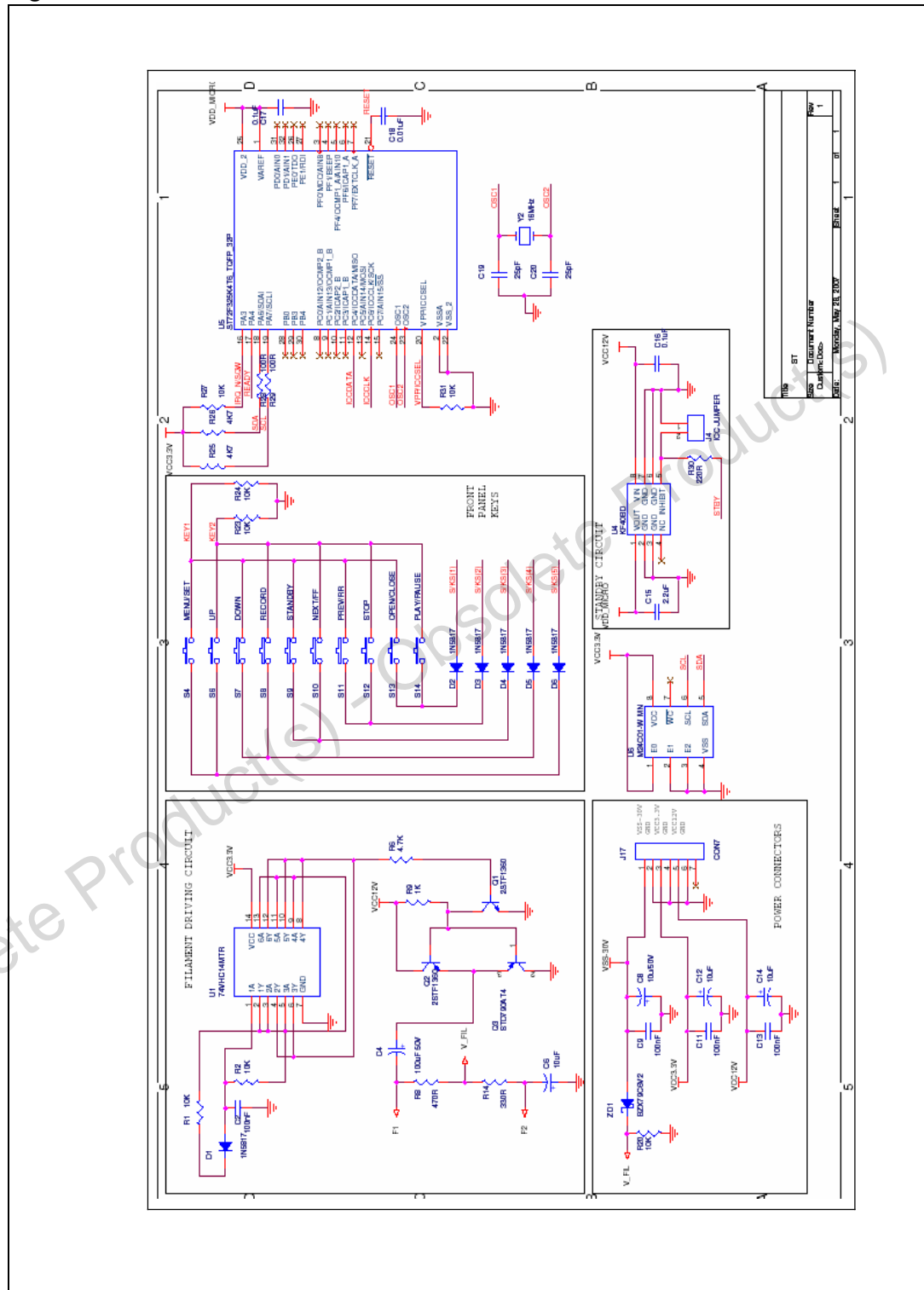


Figure 2. Schematic 2/2



2 Revision history

Table 1. Document revision history

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

Obsolete Product(s) - Obsolete Product(s)

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