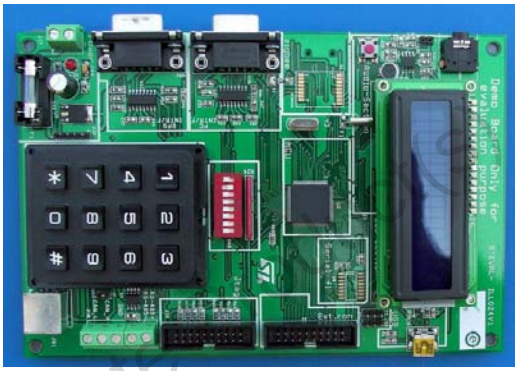
STEVAL-ILL024V1

STM32F103VB-based control unit for LED matrix display demonstration system

Data brief

Features

- Based on the STM32F103VB 32-bit MCU
- RS-485/CAN link between control modules
- Keyboard interface for display data configuration
- GPS interface for positional data updates
- Playback of prerecorded .wav audio messages
- MicroSD card interface for data storage
- RoHS compliant



STEVAL-ILL024V1

AM05062V1

Description

The STEVAL-ILL024V1 LED matrix control unit demonstrates the capabilities of the STP16DP05 LED driver to drive an LED matrix panel. The control unit is part of a complete LED matrix display demonstration system that includes the STEVAL-ILL025V1 LED matrix display panel.

The STM32F103VB microcontroller-based control unit can be configured to operate as master (responsible for sending the commands for display control) or as slave (responsible for receiving commands and executing them on the display unit).

The display can be configured with a PS2 keyboard for any of nine available display modes and nine different speeds, or the display settings can be configured through Windows® HyperTerminal™ using the serial interface included on the control unit.

A GPS module can be connected through a USART port to allow GPS data to be displayed with latitude, longitude and real-time clock information.

The system also includes audio output for playback of the prerecorded .wav file from the microSD card.

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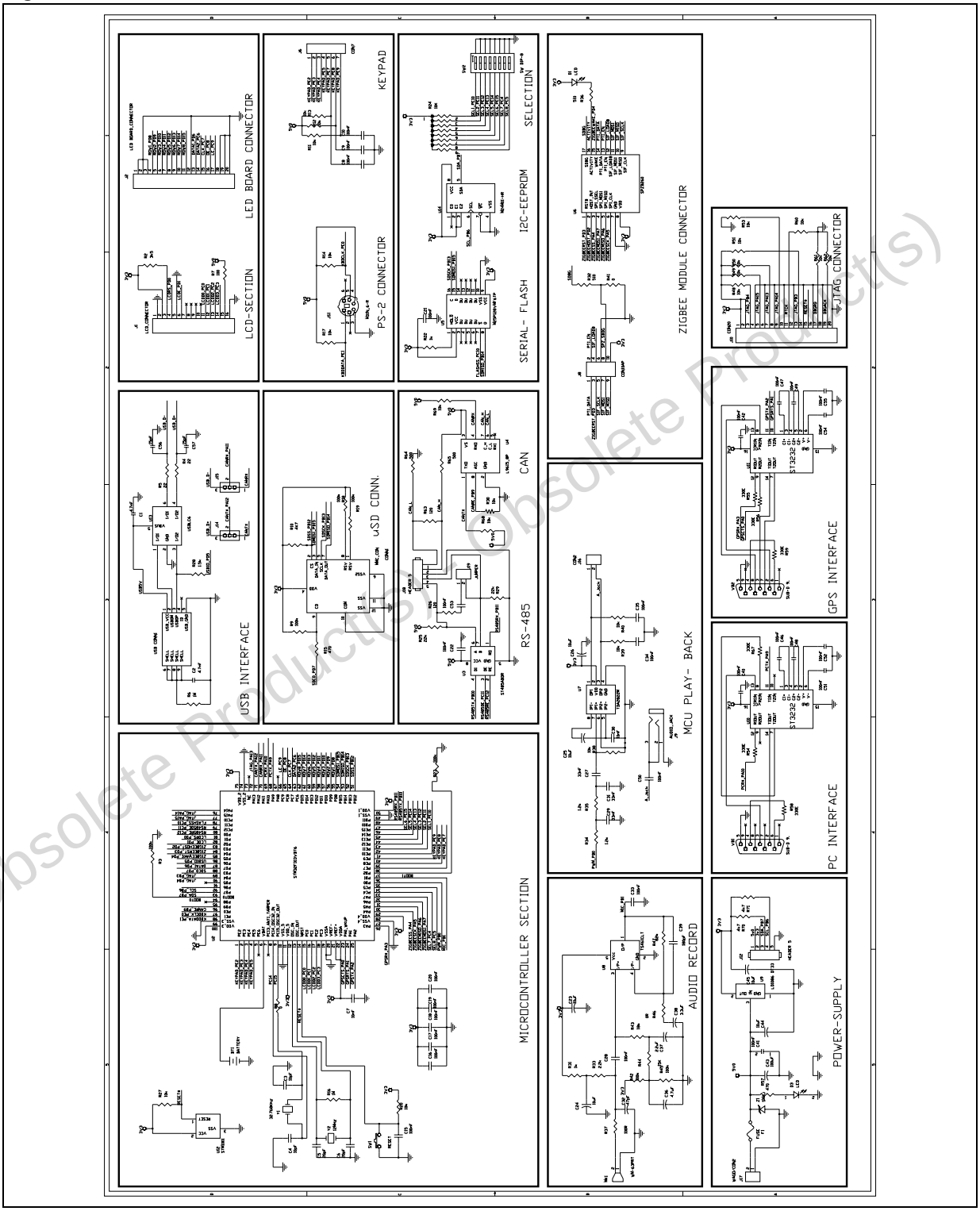
1 Schematic diagrams

Figure 1. Circuit schematics



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2 Revision history

Table 1. Document revision history

Date	Revision	Changes
04-Aug-2009	1	Initial release.

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