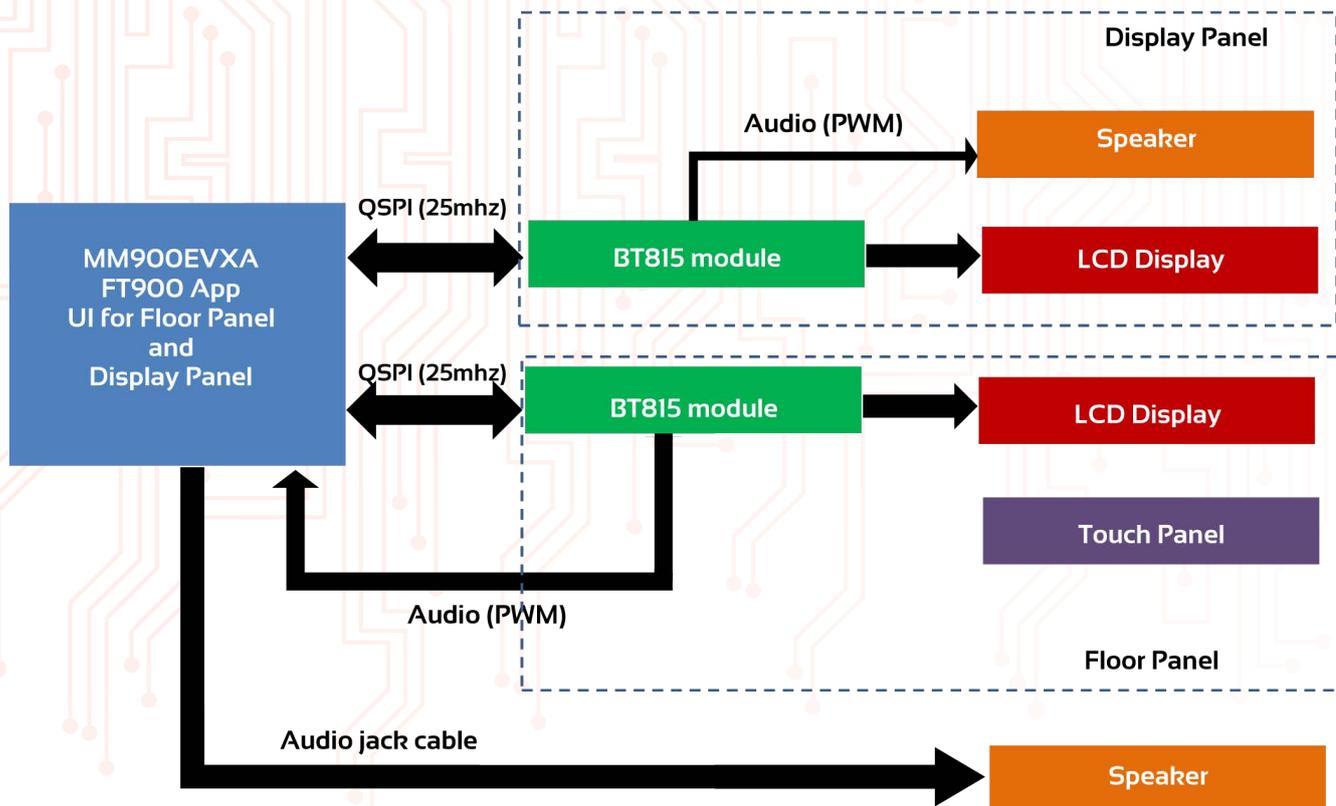


The elevator application aims to demonstrate the usage of a BT815 chip to construct menus with objects and widgets to form a graphics rich display using simple instructions. Video is played back in the background for any advertisement or monitoring purposes.

The demo setup consists of a MM900A1A module and two BT815 demo boards. The MM900A1A has a FT900 as a host controller, SD card to store audio assets and a QSPI interface to instruct the BT815 for screenshot construction. The BT815 demo board consists of a BT815 graphics controller, external flash to store bitmaps and video assets, WVGA LCD with 24 bit RGB parallel interface, a Goodix touch controller with I2C interface and speaker for audio and synthesized sound.

The application uses two BT815 modules to construct two displays - a floor panel and a display panel. A floor panel screenshot is constructed with floor number buttons, door close, door open, fan and bell button for passengers to press destination floors or respective control buttons. A display panel screenshot is constructed with floor number, unicode string as running text, time and date and video is played back in a loop at the advertisement area by streaming avi content from flash to the BT815. The audio announcements of floor numbers, doors opening or closing, going up or down is played back by rendering audio files from an SDCard to a speaker in accordance with the elevator state.



The Car Dashboard application aims to demonstrate the usage of a BT815 chip to construct a menu with objects and widgets to form a graphics rich display using simple instructions. Bitmap assets and fonts are stored in external flash and rendered directly to the display.

The demo setup consists of a PC, MM900A1A module and BT815 demo boards. The car simulator application is run on PC and dashboard information is rendered to a display module via an RS232 cable. MM900A1A has an FT900 as a host controller, UART interface to receive car dashboard information and QSPI interface to instruct the BT815 for screenshot construction. The BT815 demo board consists of a BT815 graphics controller, external flash, WVGA LCD with 24 bit RGB parallel interface, Goodix touch controller with I2C interface and speaker for audio and synthesized sound.

The application on the FT900 constructs a menu by displaying car dashboard bitmaps in the background and needle animation in the foreground in accordance with the values received from PC car simulator. The bitmap assets are stored in external flash and rendered directly to the display using EVE instructions. A pre-recorded car game is run in a loop in the car simulator and car engine parameters such as rpm, speed, engine temperature, fuel etc are rendered to the display module via a virtual com port. The communication between the MM900EV1A and the car simulator is via a USB UART bridge cable, with a command line interface to render car dashboard parameters.

