

## STEVAL-CCM004V1

## TFT LCD panel controller board for the STM3220G-EVAL

**Data brief** 

#### **Features**

- Direct RGB signal driving using the STM32 without on-chip controller requirements
- STM3220G-EVAL based plug-in daughterboard for feature extensibility
- Ready-to-use graphic library APIs for easy GUI design
- Real-time camera image streaming to showcase driver performance
- Onboard constant current drive circuit for an LED based TFT-LCD backlight
- Static image display with refresh rate of 60 frames per second
- RoHS compliant



The STEVAL-CCM004V1 TFT-LCD panel controller is designed to be connected to the STM3220G-EVAL evalutation kit to demonstrate the capabilities of the STM32F2x high performance flexible static memory interface (FSMC) for a driving TFT-LCD.

The 3.5" QVGA resolution TFT-LCD panel is interfaced with the STM32 FSMC peripheral.



Schematic STEVAL-CCM004V1

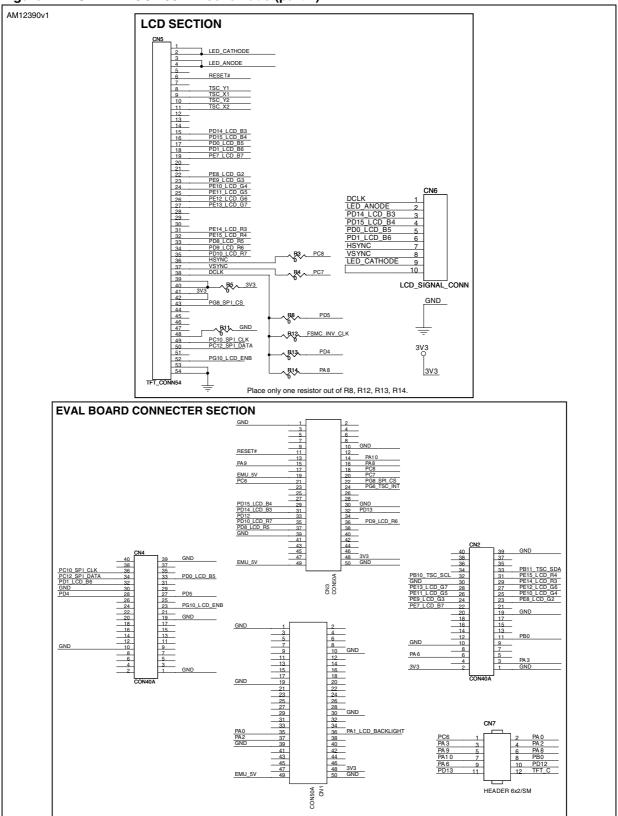
## 1 Schematic

Figure 1. STEVAL-CCM004V1 schematic (part 1) 2 4 Sp. 29 TOUCH SCREEN CONTROLLER C2 2pF **LCD BACKLIGHT DRIVER** D1 STPS1L40M LED\_CATHODE 85 R18 must be selected as per the current requirementfor TFT\_LCD Exposed Pad should act as heat sink, vias can be ceated. В GNL
PGND
EX PAD
OUT EN VIN 5 -8 12 9 TSC\_Y2 15 C1 SINGLE CHANNEL INVERTER FSMC\_INV\_CLK HSYNC\_C VCC VCC 74LX1G08 CTR 74LX1G08 CTR D 4 NC D A D D 4 P C NC 1A GND

AM12389v1

PA 2 GNC STEVAL-CCM004V1 Schematic

Figure 2. STEVAL-CCM004V1 schematic (part 2)



Revision history STEVAL-CCM004V1

# 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
06-Jul-2012	1	Initial release.

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