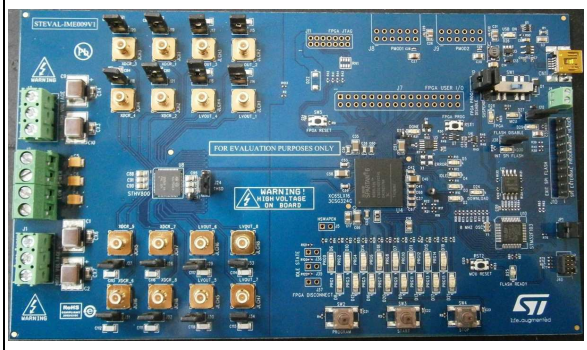
STEVAL-IME009V1

STHV800 Ultrasound Pulser IC evaluation board

Data brief



Features

- 8-channel outputs: high voltage and low voltage BNC connectors
- Load simulator using signal equivalent circuits
- Possibility to set up own load simulator
- 16 preset waveforms
- USB connector to connect STM32 with PC and supply power to it
- 4 MB serial Flash memory to host FPGA code and waveforms
- Memory expansion connector to add external serial Flash
- Connectors to supply high voltage and low voltage to the STHV800 output stage
- LEDs to monitor the power management stage
- Human machine interface to select, start and stop the generation of the preset waveforms
- 25 LEDs to monitor board behavior
- RoHS compliant

Description

The STEVAL-IME009V1 is a product evaluation board designed around the STHV800 8-channel high voltage pulser, a state-of-the-art device designed for ultrasound imaging applications.

The output waveforms can be displayed directly on an oscilloscope by connecting the scope probe to the relative BNCs. 16 preset waveforms are available to test the HV pulser under varying conditions.

1 Schematic diagrams

Figure 1. STEVAL-IME009V1 circuit schematic (1 of 9)

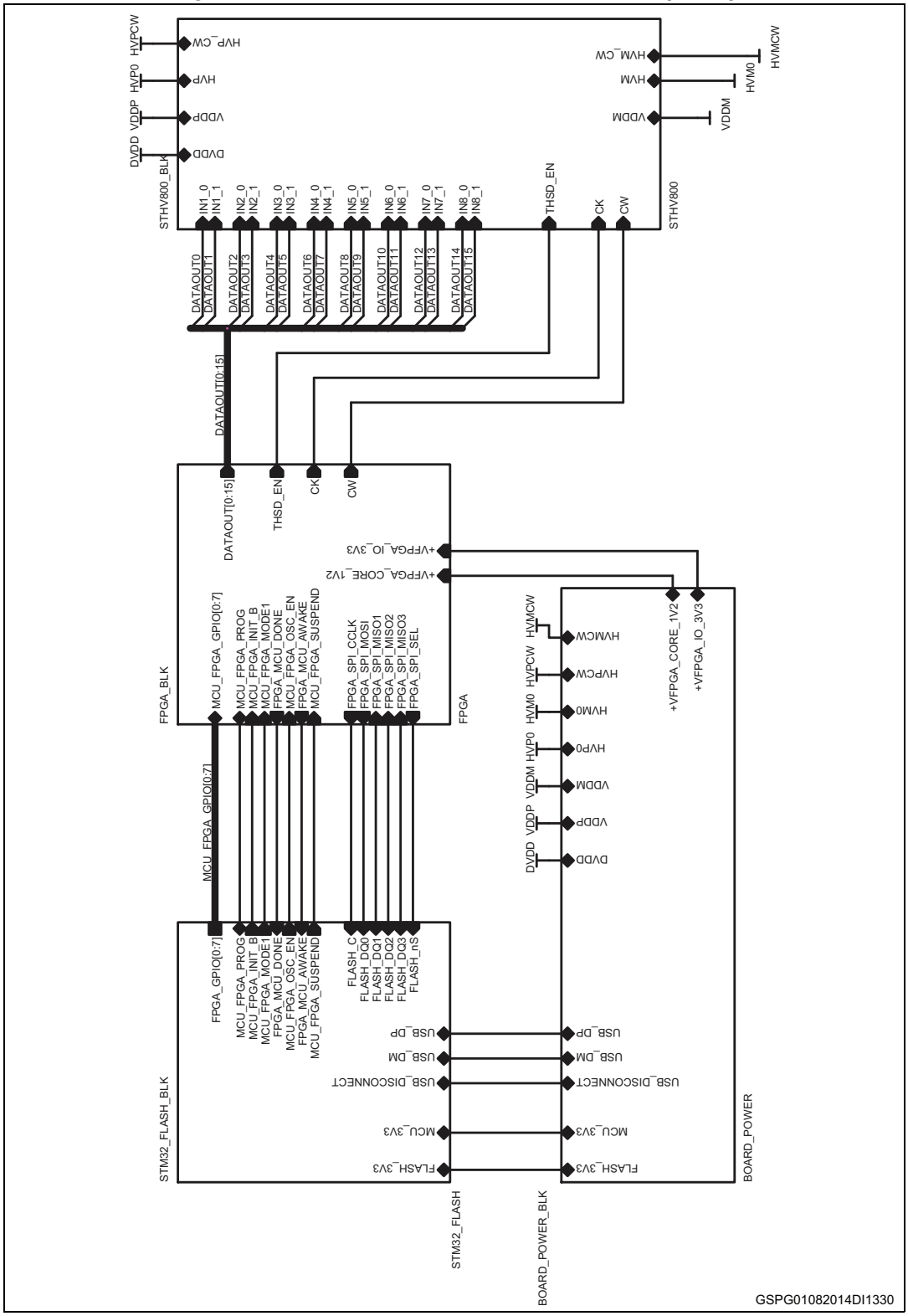


Figure 2. STEVAL-IME009V1 circuit schematic (2 of 9)

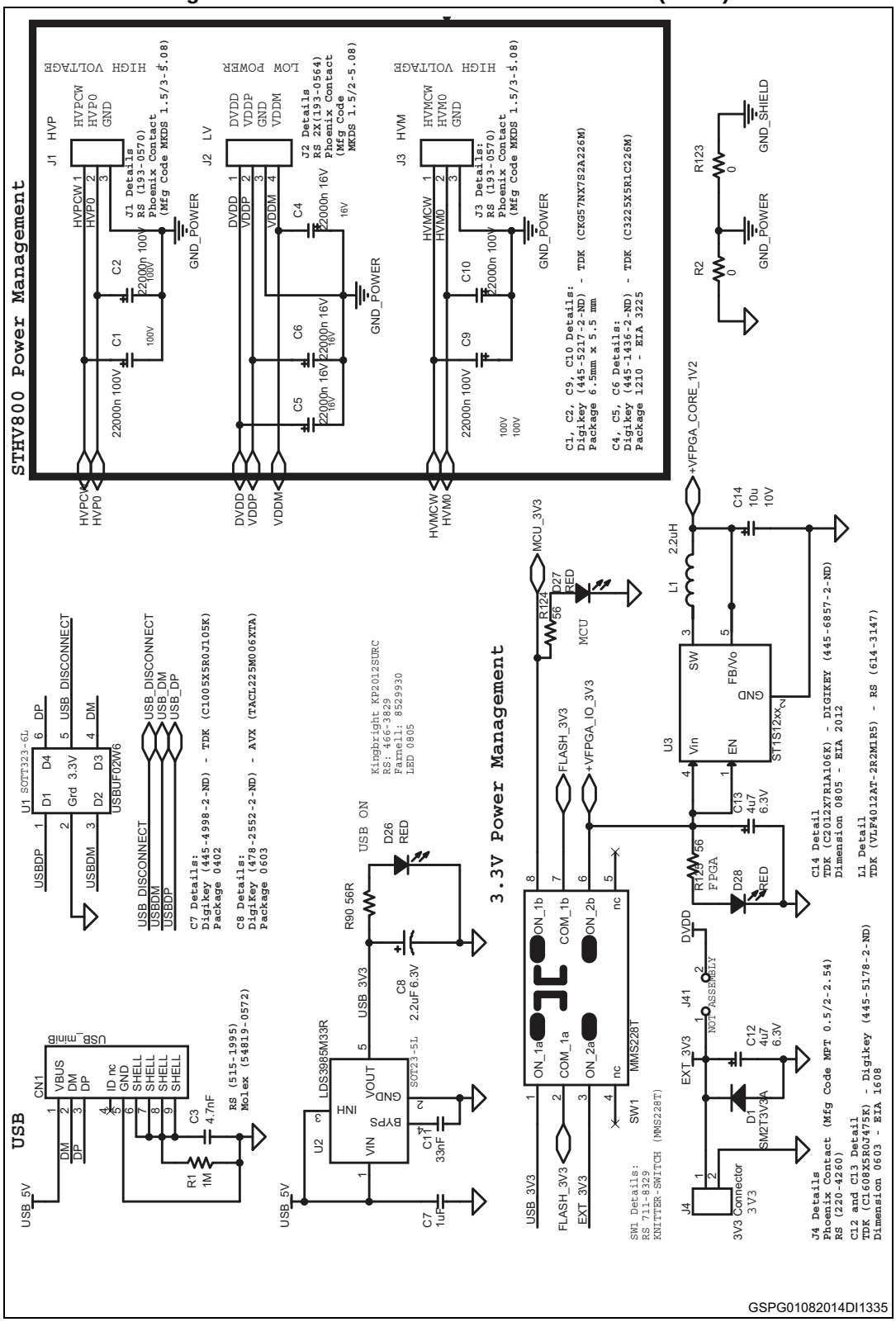


Figure 3. STEVAL-IME009V1 circuit schematic (3 of 9)

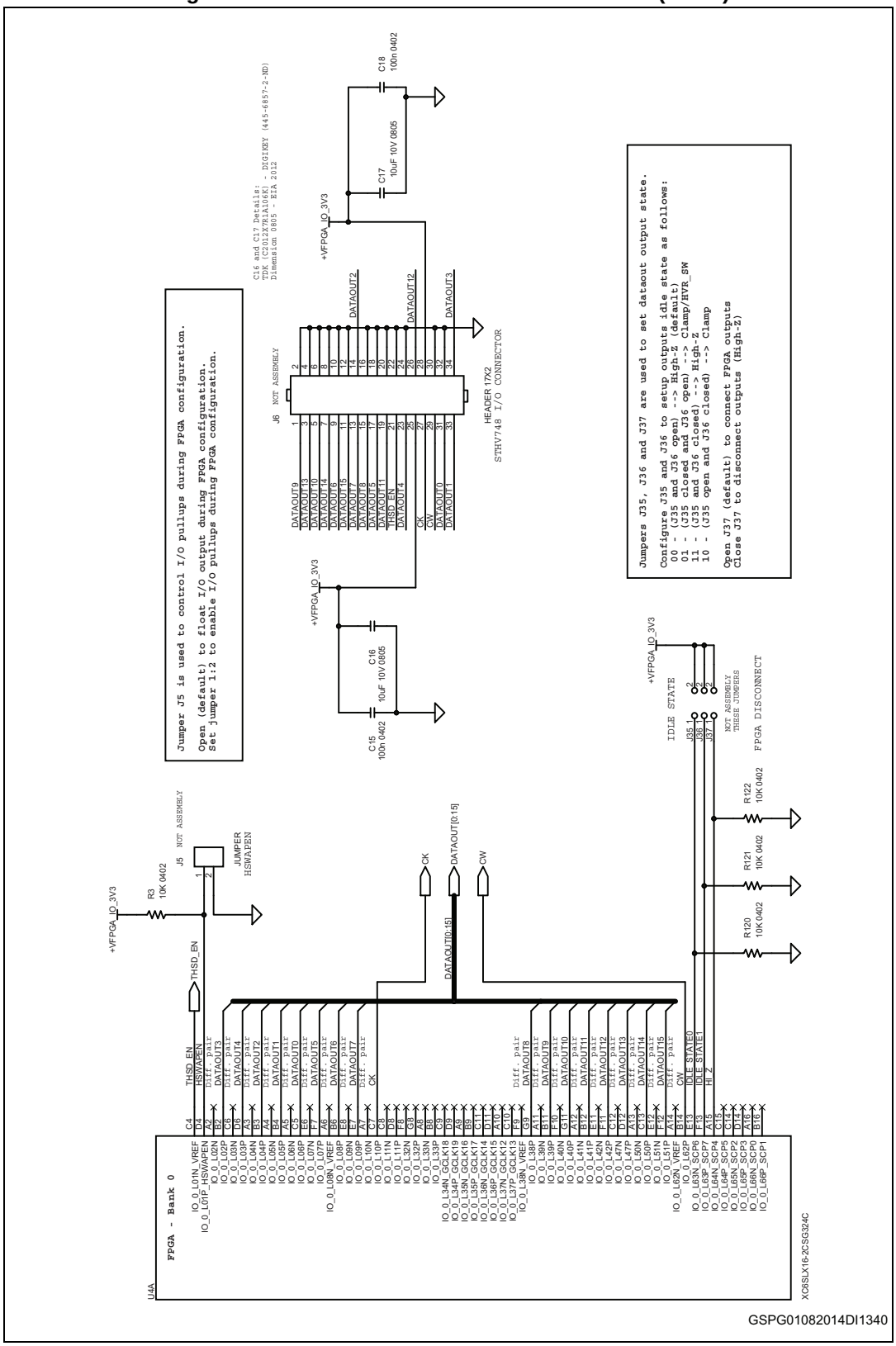


Figure 4. STEVAL-IME009V1 circuit schematic (4 of 9)

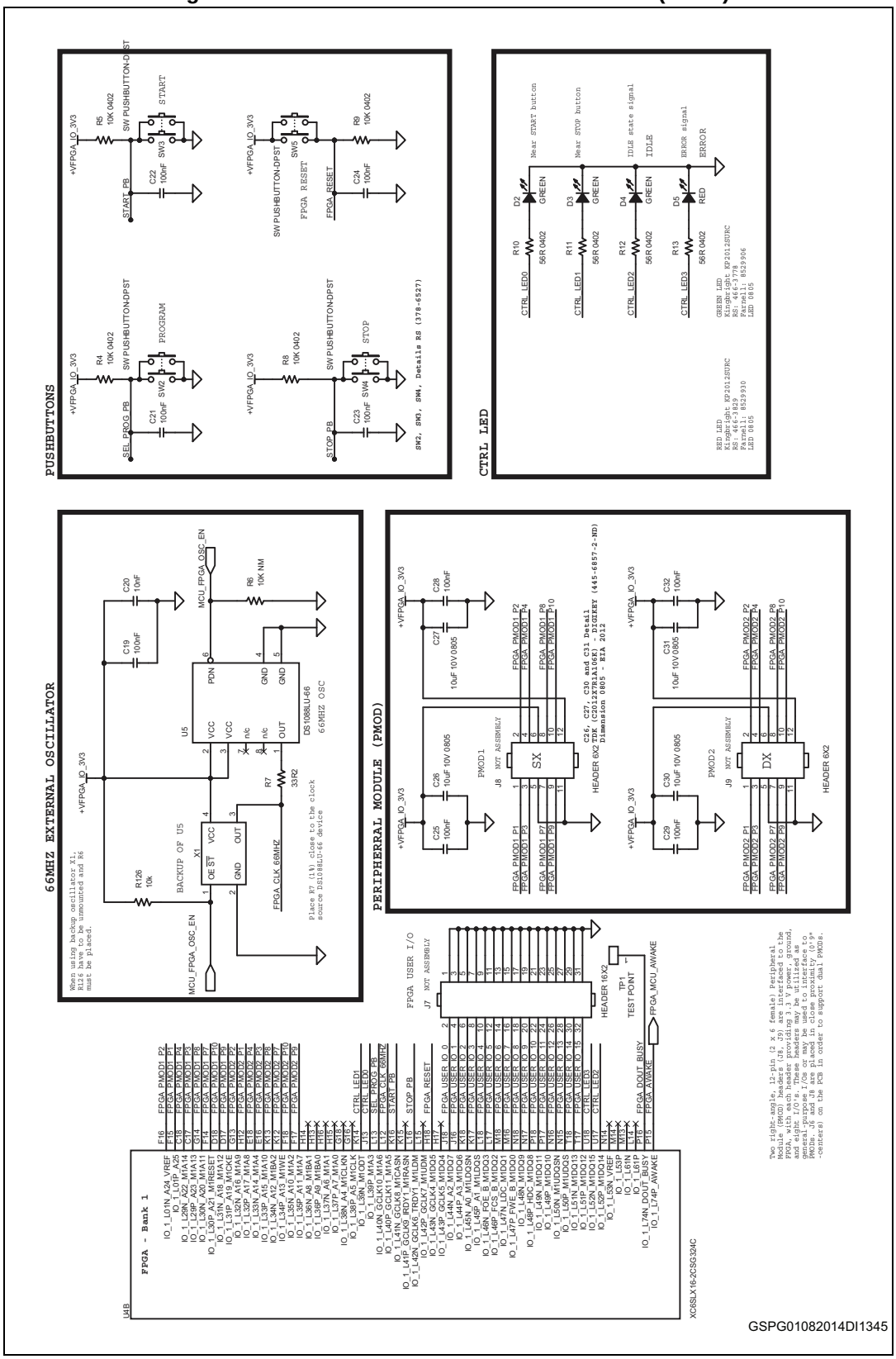


Figure 5. STEVAL-IME009V1 circuit schematic (5 of 9)

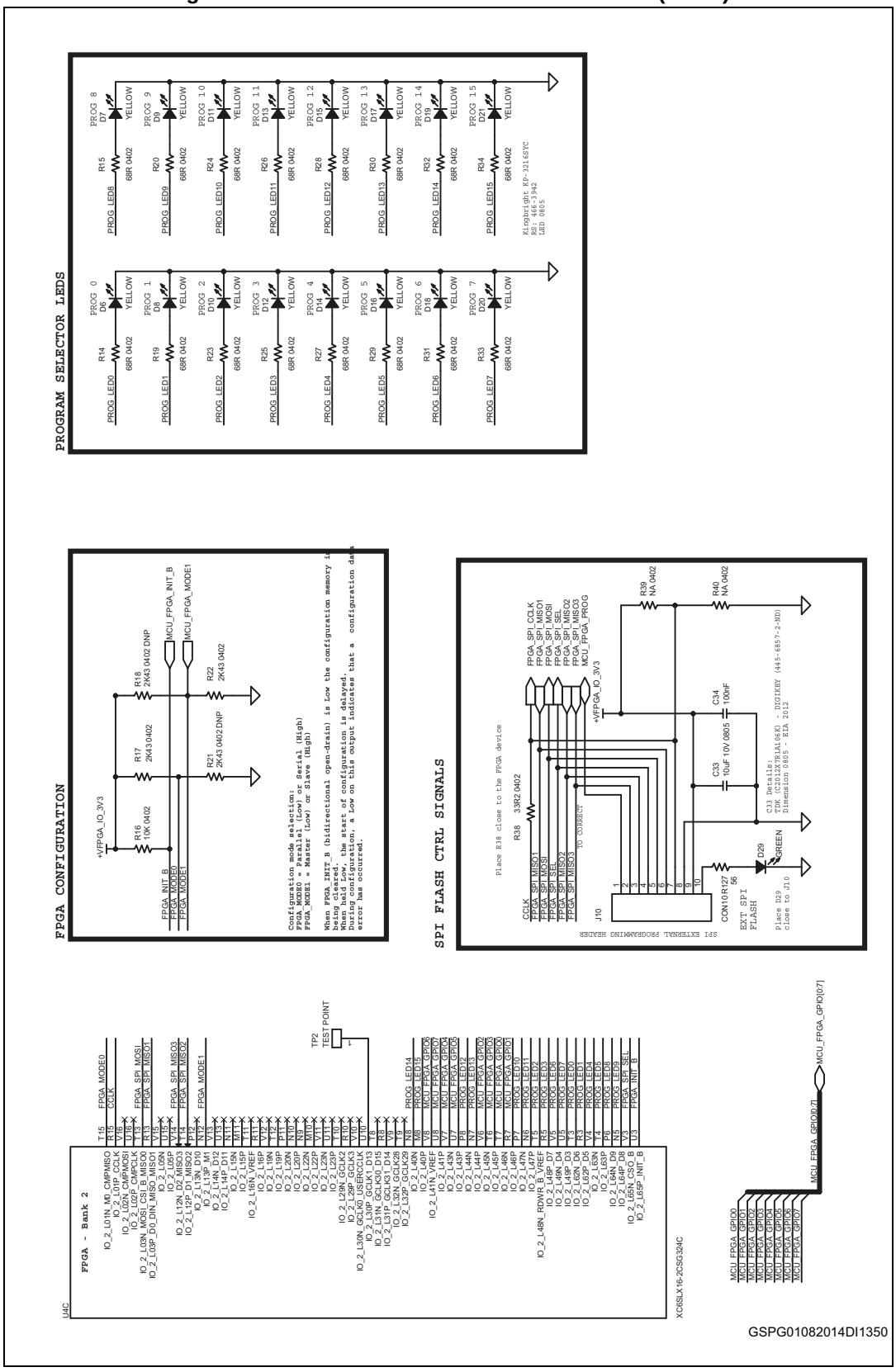


Figure 6. STEVAL-IME009V1 circuit schematic (6 of 9)

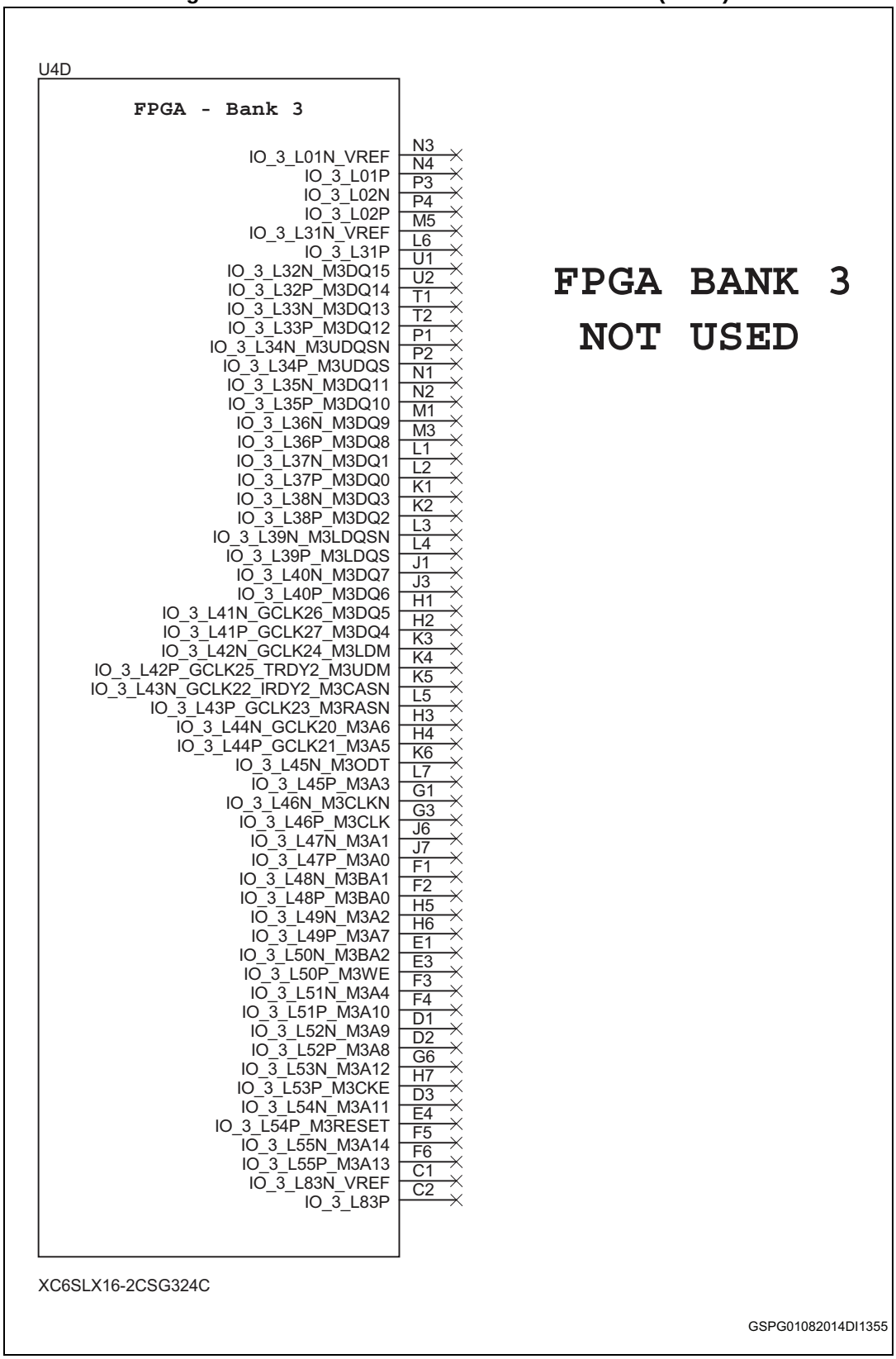


Figure 7. STEVAL-IME0089V1 circuit schematic (7 of 9)

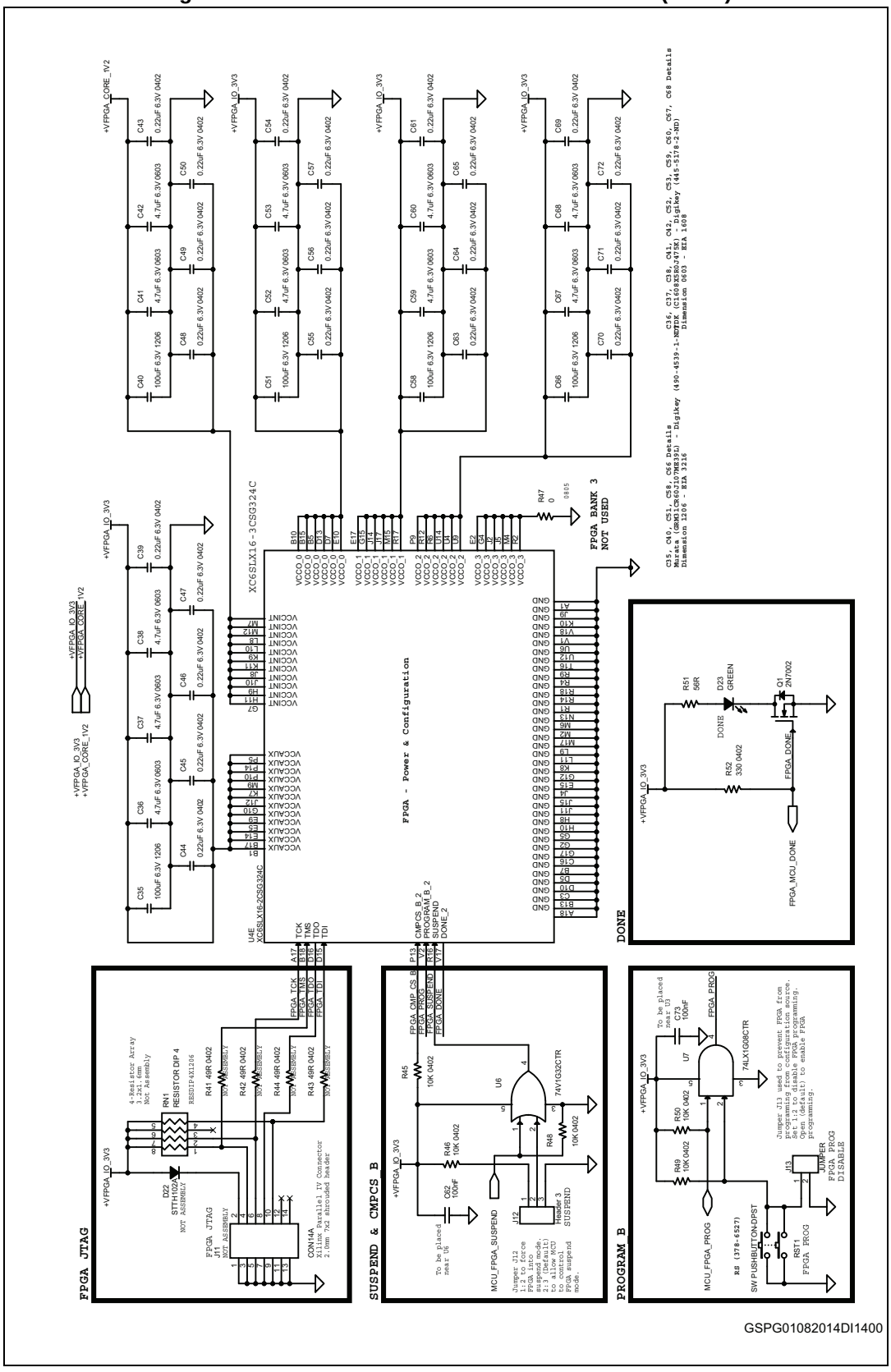


Figure 8. STEVAL-IME009V1 circuit schematic (8 of 9)

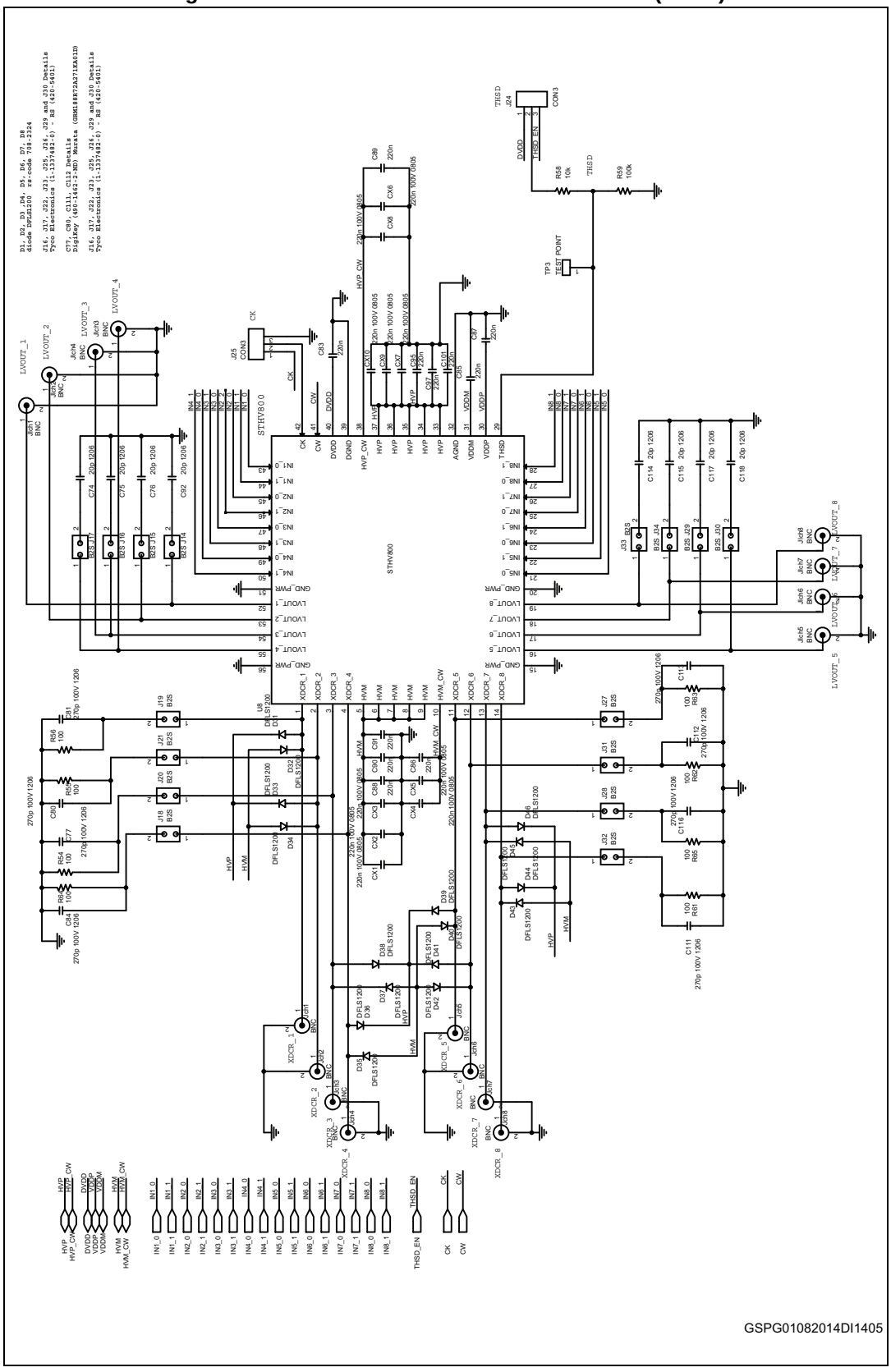
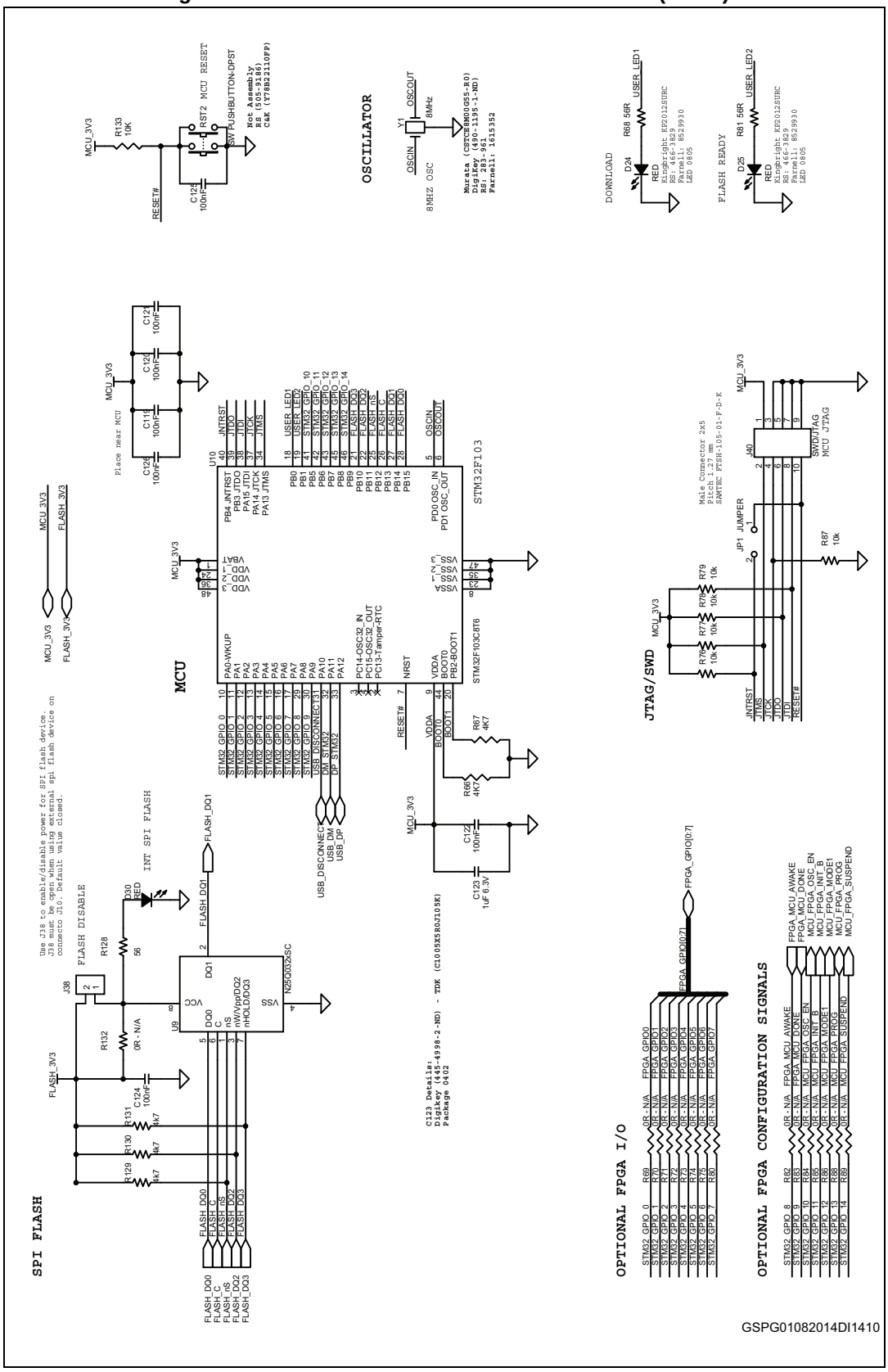


Figure 9. STEVAL-IME0089V1 circuit schematic (9 of 9)



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
07-Aug-2014	1	Initial release.
06-Aug-2015	2	Updated title on the cover page.