

## 16-channel high voltage pulser evaluation kit for ultrasound imaging applications



### Features

- Kit consists of three connected modules
- Pulser module (STEVAL-IME014V1):
  - 16-channel high voltage outputs
  - typical load connected on high voltage outputs (100 Ω / 300 pF); can be easily removed
  - 16-channel low voltage outputs
  - no load on low voltage outputs
  - four preset programs and waveforms
  - USB interface to change programs and waveforms
  - button interface to control waveform generation
  - status LEDs
- Power supply module (STEVAL-IME014V1D):
  - four high voltage and one low voltage supply lines
  - all other necessary low voltage supplies generated on-board
- STM32 Nucleo microcontroller module:
  - STM32 microcontroller
- GUI to configure the kit
- Kits can be chained in master/slave mode

### Description

The STEVAL-IME014V1B evaluation kit, based on the STHV1600 16-channel high voltage pulser for ultrasound imaging applications, can be used to evaluate the characteristics and functionality of the HV pulser.

Four preset programs are available to test the pulser in typical conditions, and output waveforms can be displayed on an oscilloscope by connecting the scope probe to the relative connectors.

A graphical user interface is available to help you change waveforms and configurations easily.

#### Product summary

16-channel high voltage pulser evaluation kit for ultrasound imaging applications	STEVAL-IME014V1B
16-channel high voltage pulser designed for ultrasound imaging applications	STHV1600
Graphical user interface	STSW-IME014GUI
Compiled ready to use firmware	STSW-IME014FW

# 1 Schematic diagrams

Figure 1. STEVAL-IME014V1 schematic 1

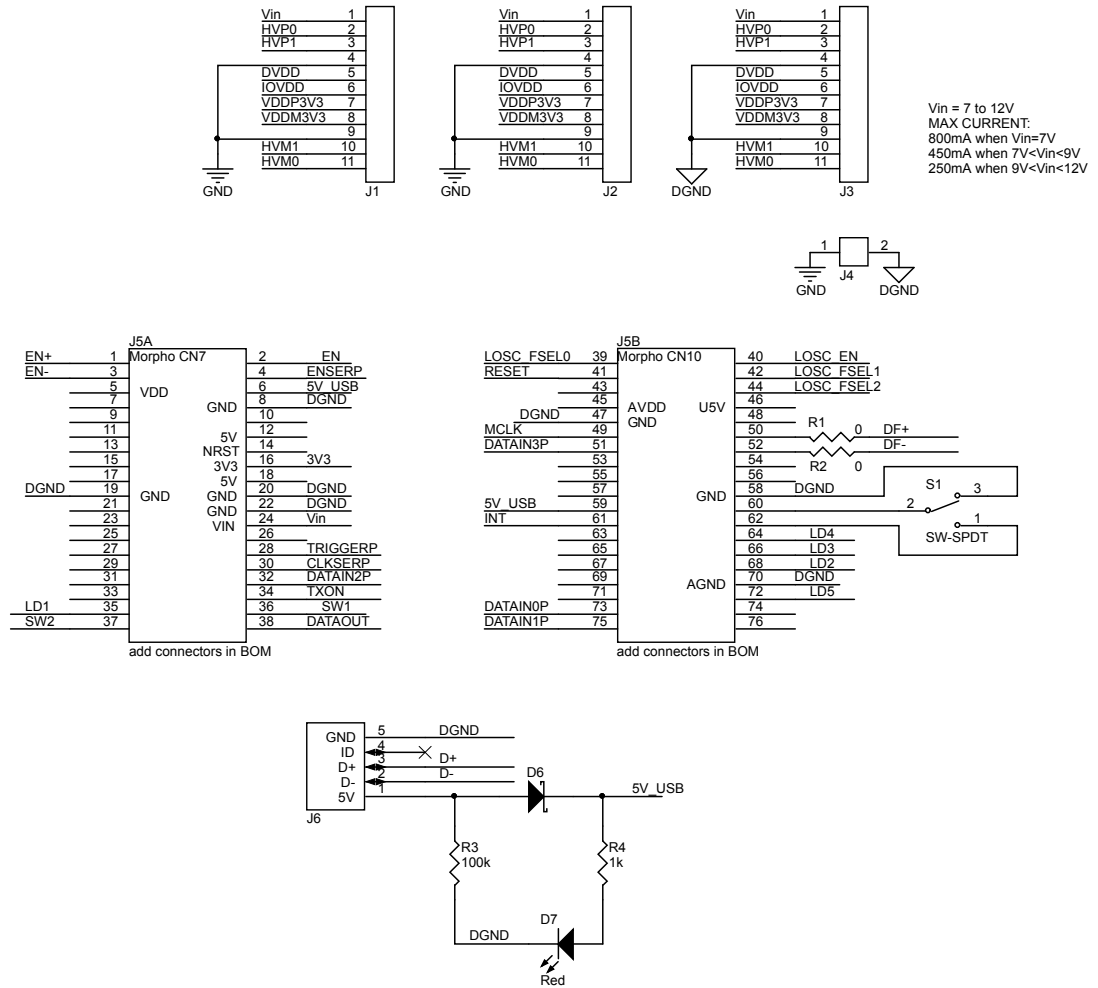


Figure 2. STEVAL-IME014V1 schematic 2

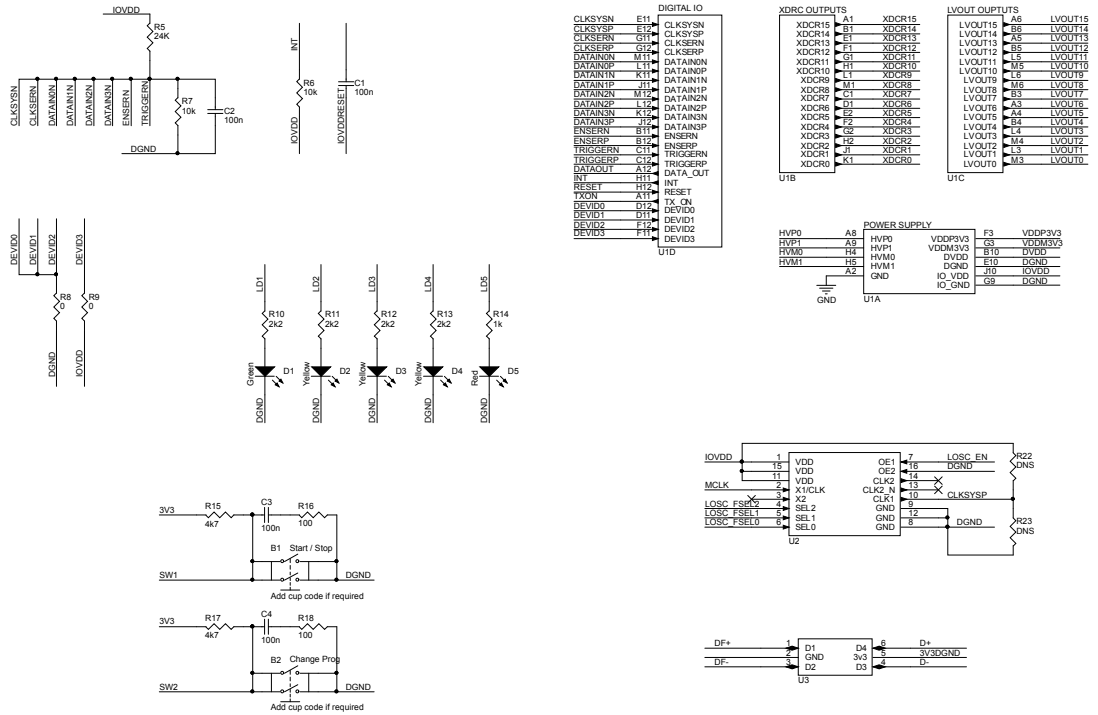


Figure 3. STEVAL-IME014V1 schematic 3

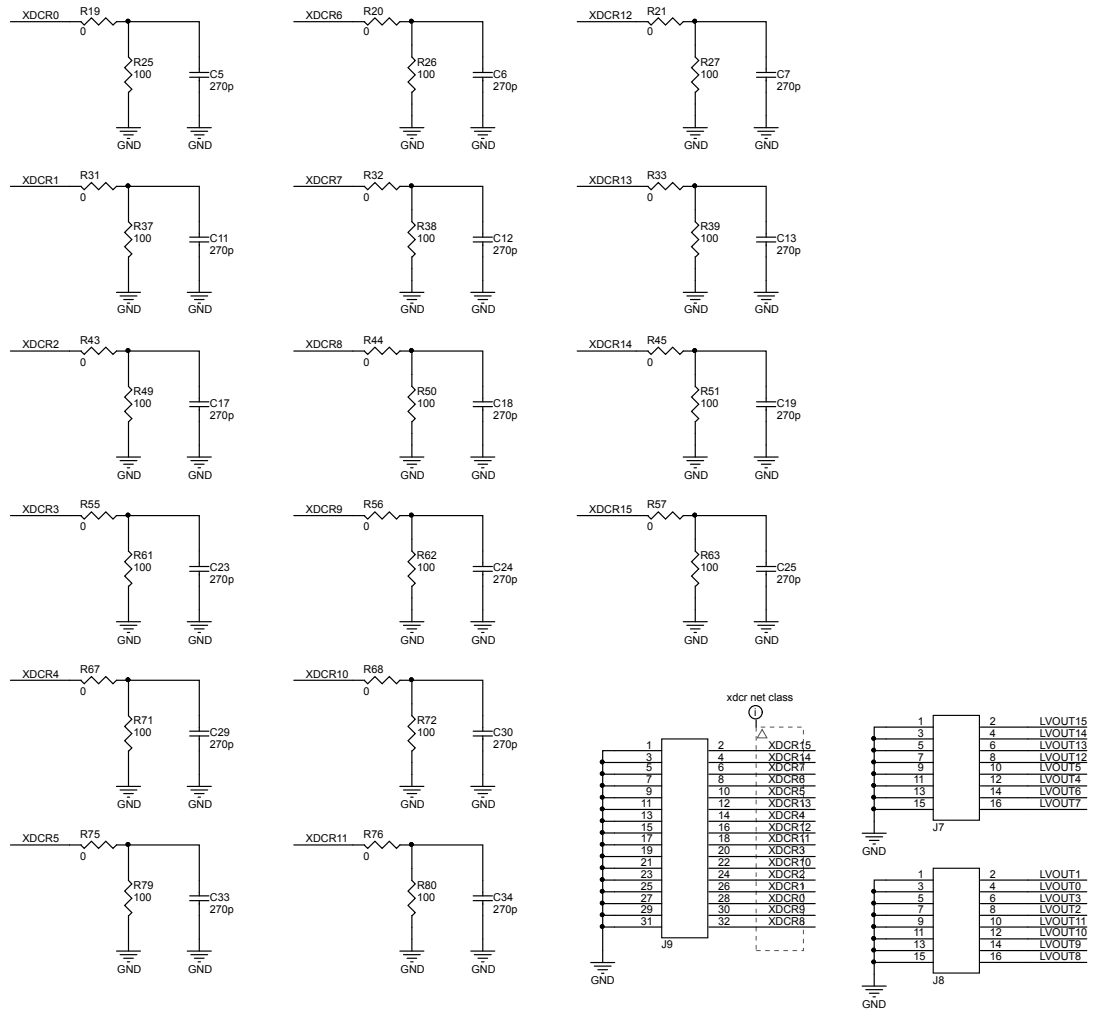


Figure 4. STEVAL-IME014V1 schematic 4

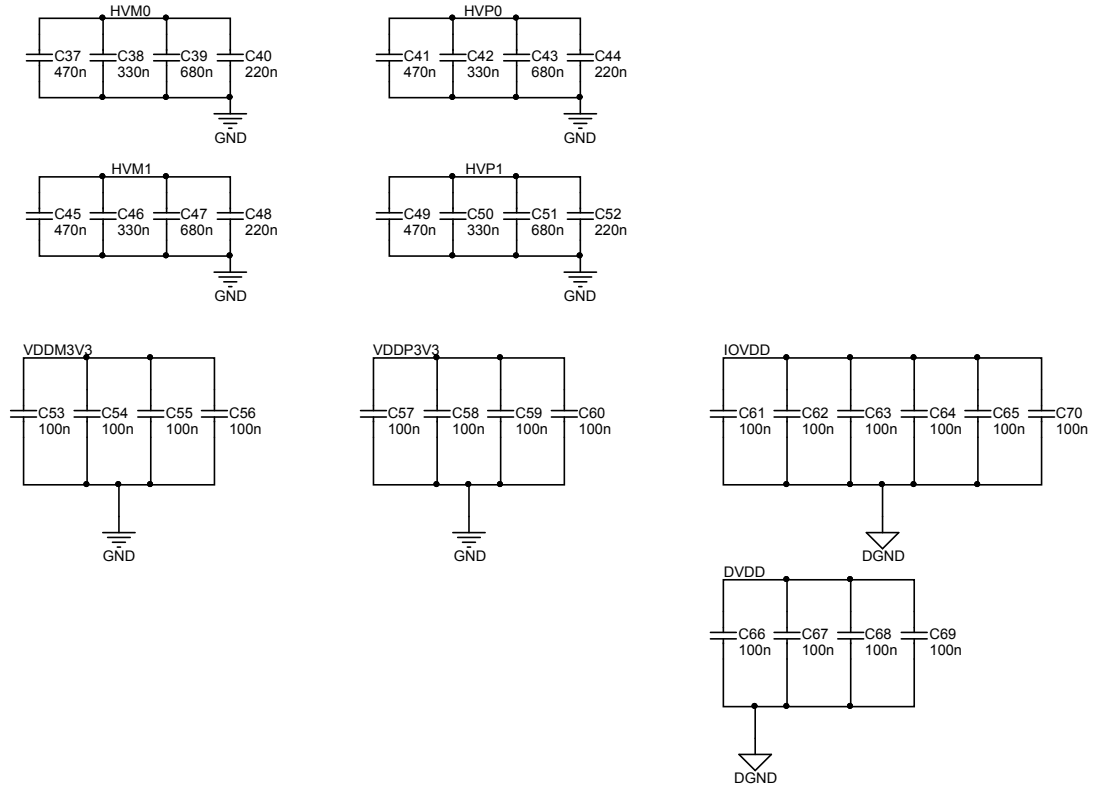
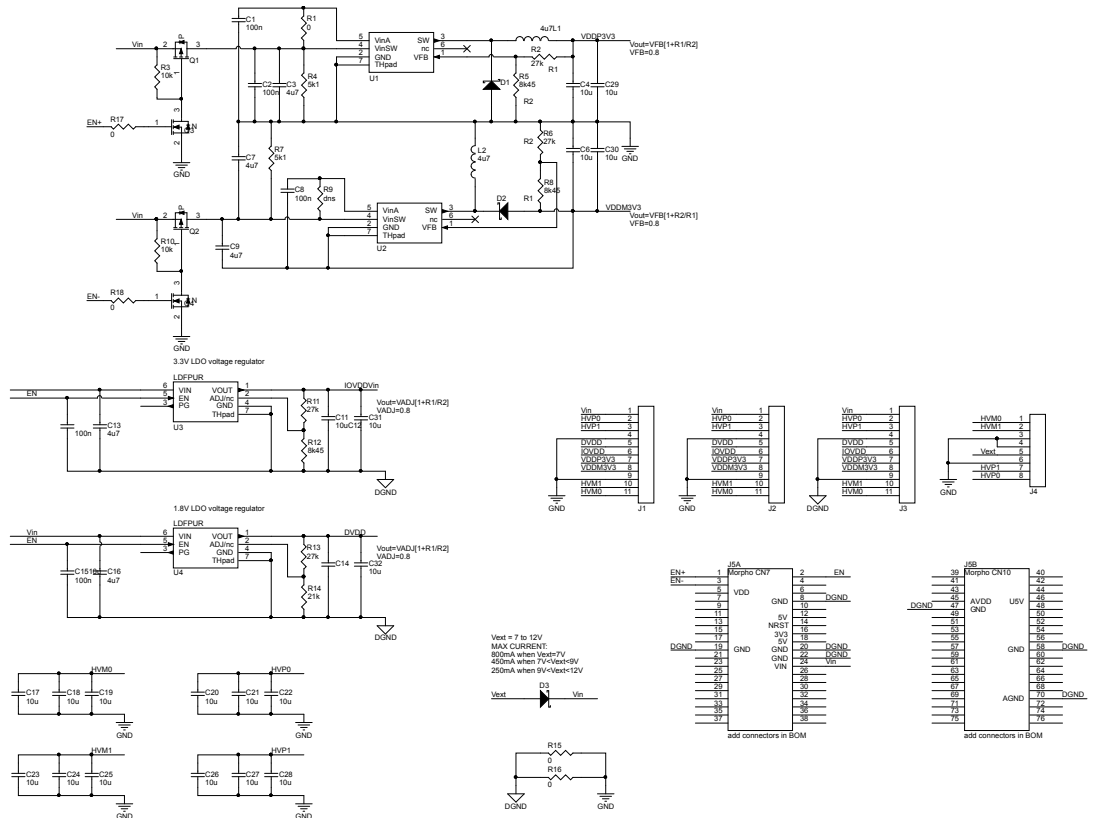


Figure 5. STEVAL-IME014V1D schematic



## Revision history

**Table 1. Document revision history**

Date	Version	Changes
08-May-2018	1	Initial release.

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