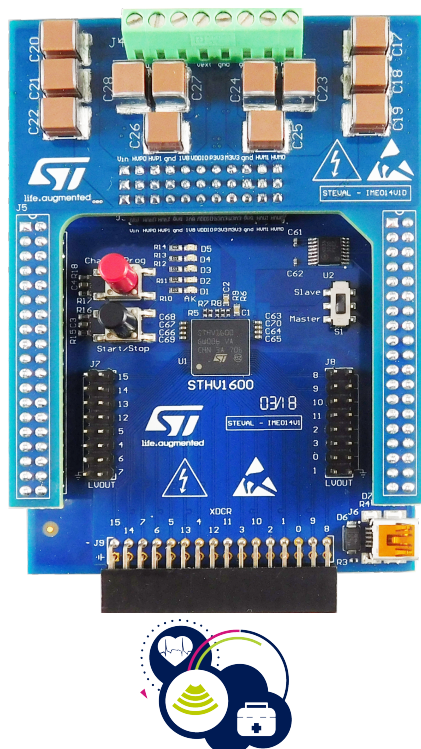


16-channel high voltage pulser evaluation kit for ultrasound imaging applications



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

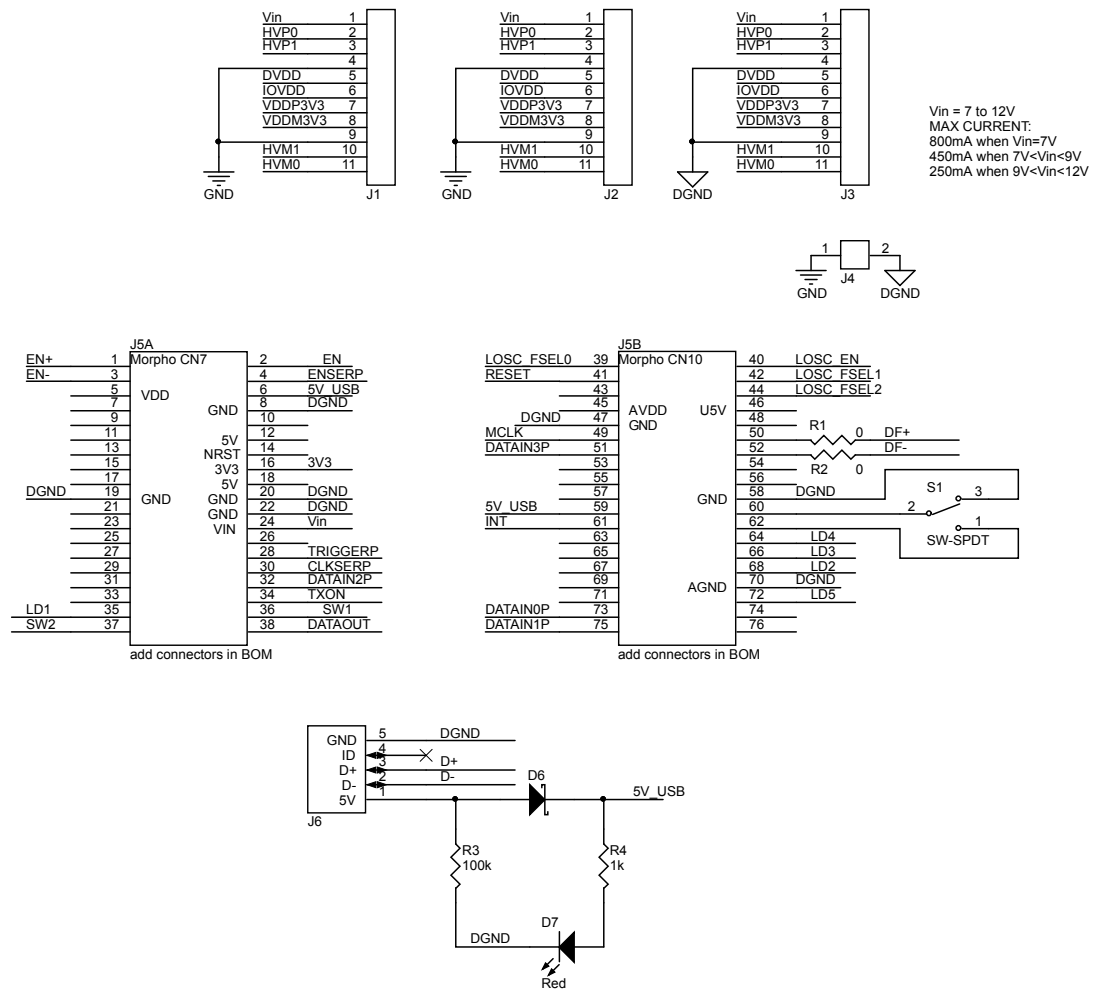


Figure 2. STEVAL-IME014V1 schematic 2

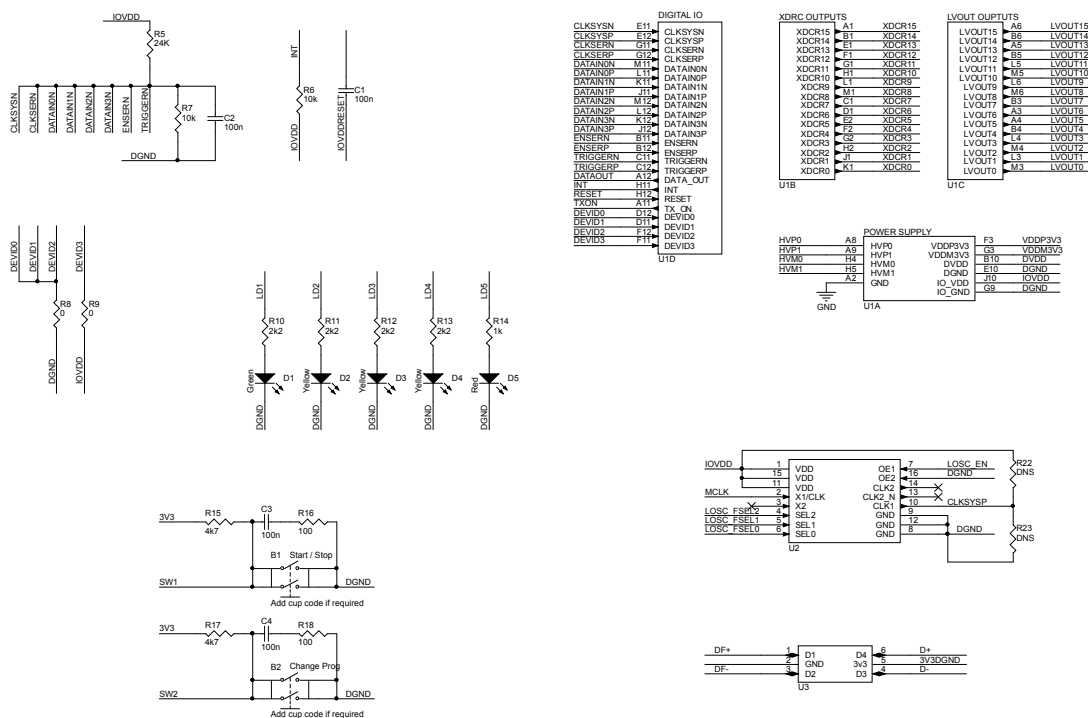


Figure 3. STEVAL-IME014V1 schematic 3

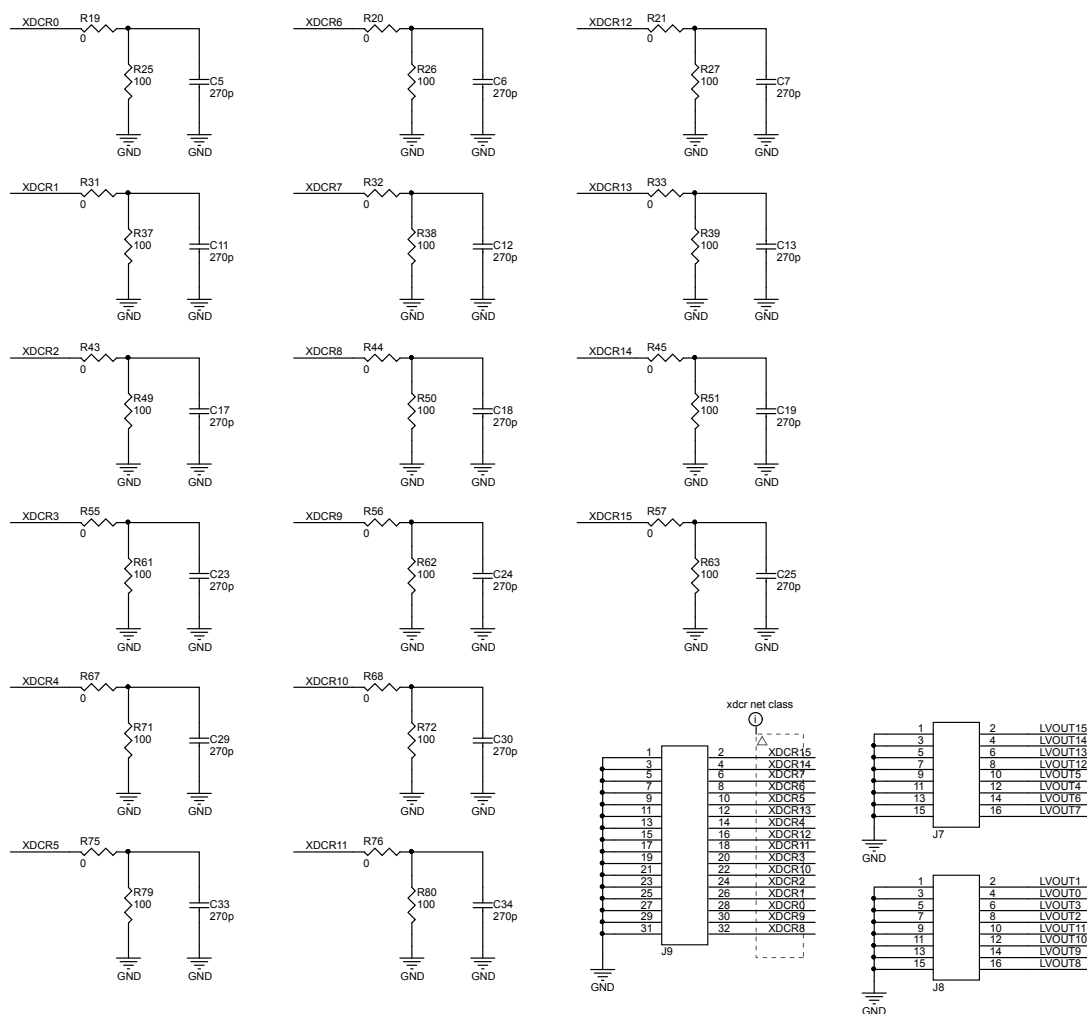


Figure 4. STEVAL-IME014V1 schematic 4

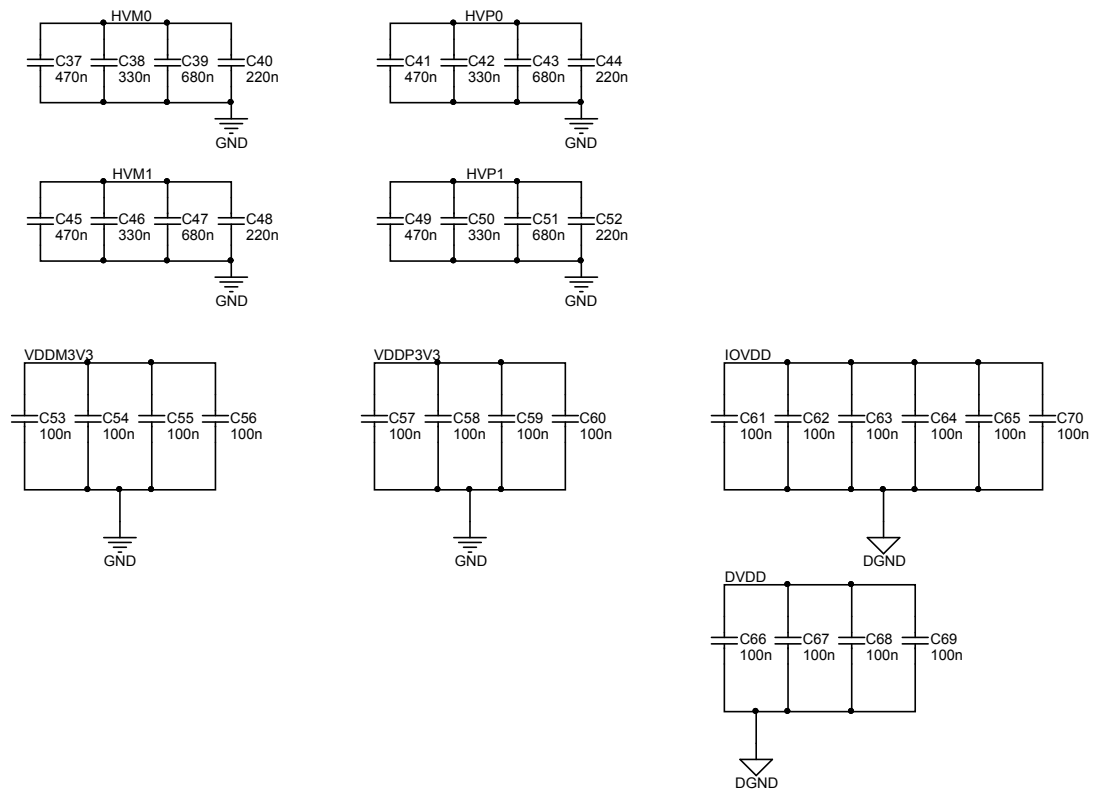
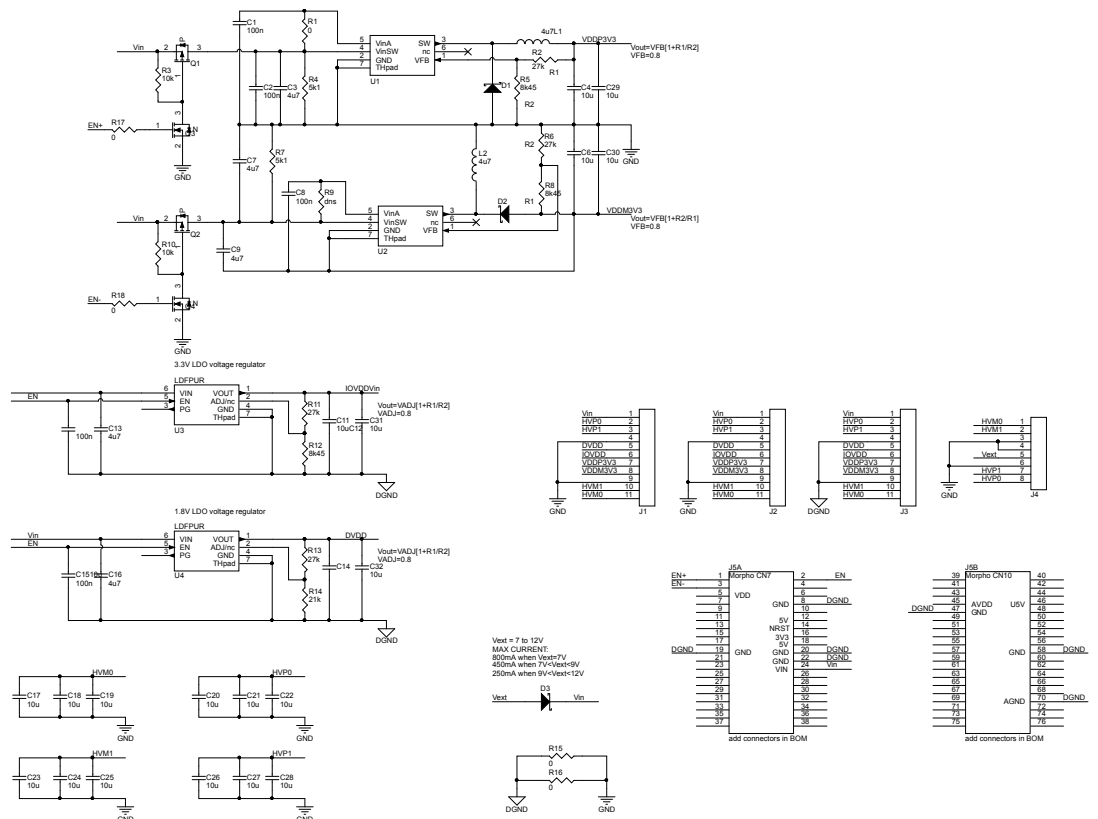


Figure 5. STEVAL-IME014V1D schematic



Revision history

Table 1. Document revision history

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

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[STMicroelectronics:](#)

[STEVAL-IME014V1B](#)