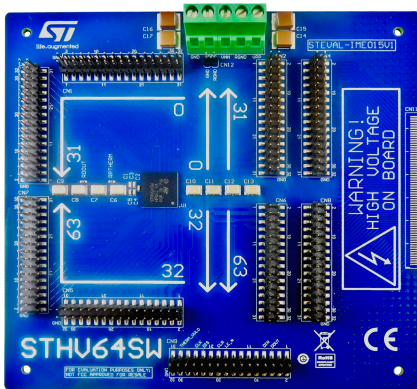


Evaluation board based on the STHV64SW high voltage switch matrix for ultrasound imaging applications



Features

- Suitable for ultrasound imaging applications
- 64 high voltage channels
- Switch input and output header connectors
- High voltage and low voltage connectors to power the STHV64SW
- Digital input and output header connector
- Optional standard probe connector footprint
- RoHS compliant
- WEEE compliant

Description

The STEVAL-IME015V1 evaluation board is based on the state-of-the-art STHV64SW high voltage switch matrix for ultrasound imaging applications.

The system can switch 64 independent high voltage channels, and the switch input and output connections are available through standard 2.54 mm headers as well as digital I/Os.

Each channel can be used as a switch for external transmitters/receivers or to directly drive transducers for low frequency applications.

An optional standard ultrasound probe connector can be soldered to the board, to help you evaluate the performance of the STHV64SW in real applications.



Product summary

STHV64SW evaluation board	STEVAL-IME015V1
Highly integrated 64-channel high voltage independent switches	STHV64SW

1 Schematic diagrams

Figure 1. STEVAL-IME015V1 board schematic (1 of 6)

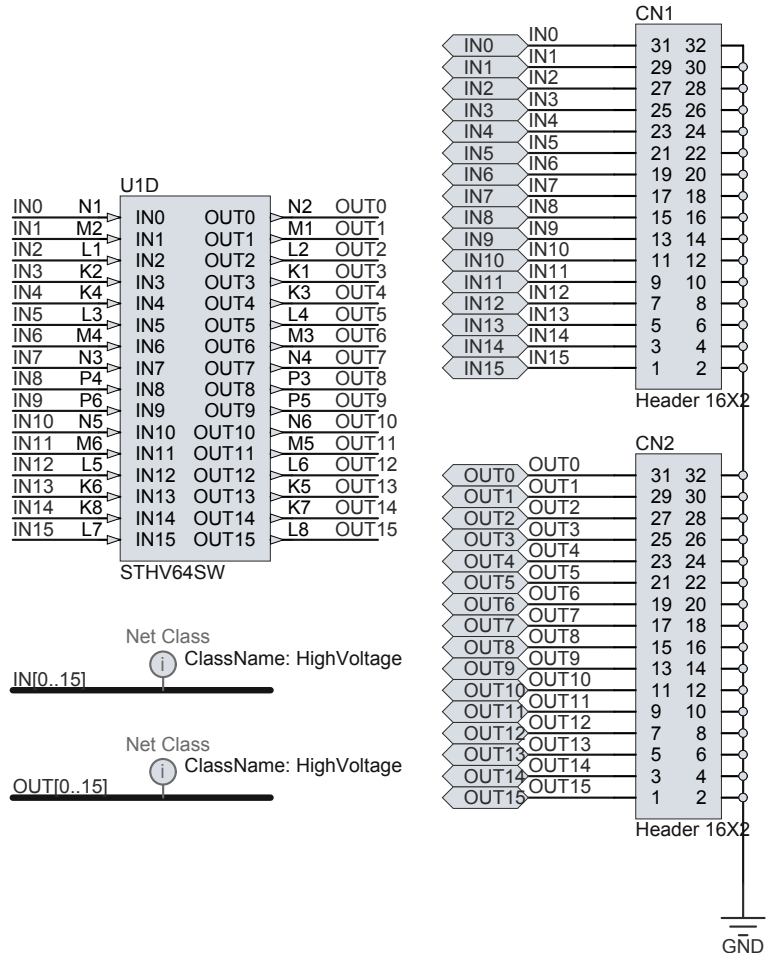


Figure 2. STEVAL-IME015V1 board schematic (2 of 6)

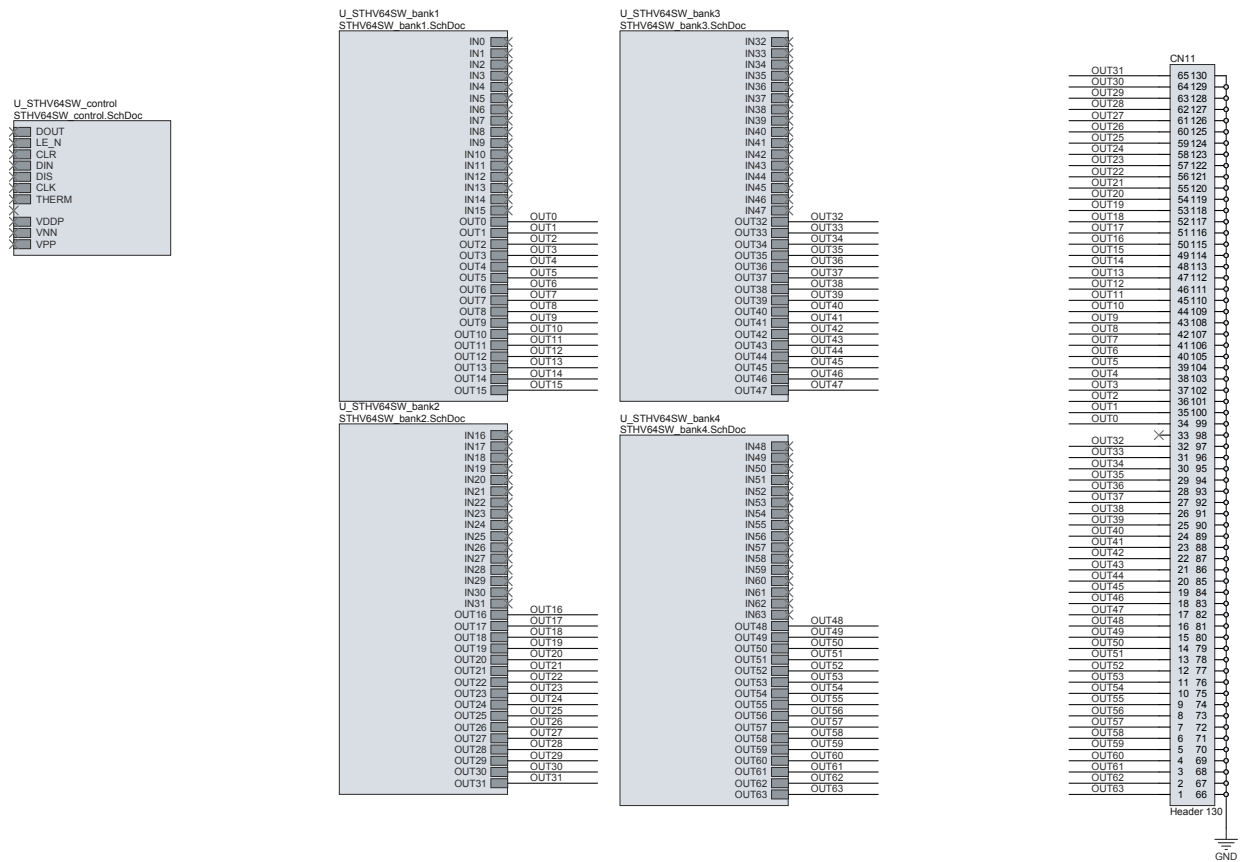


Figure 3. STEVAL-IME015V1 board schematic (3 of 6)

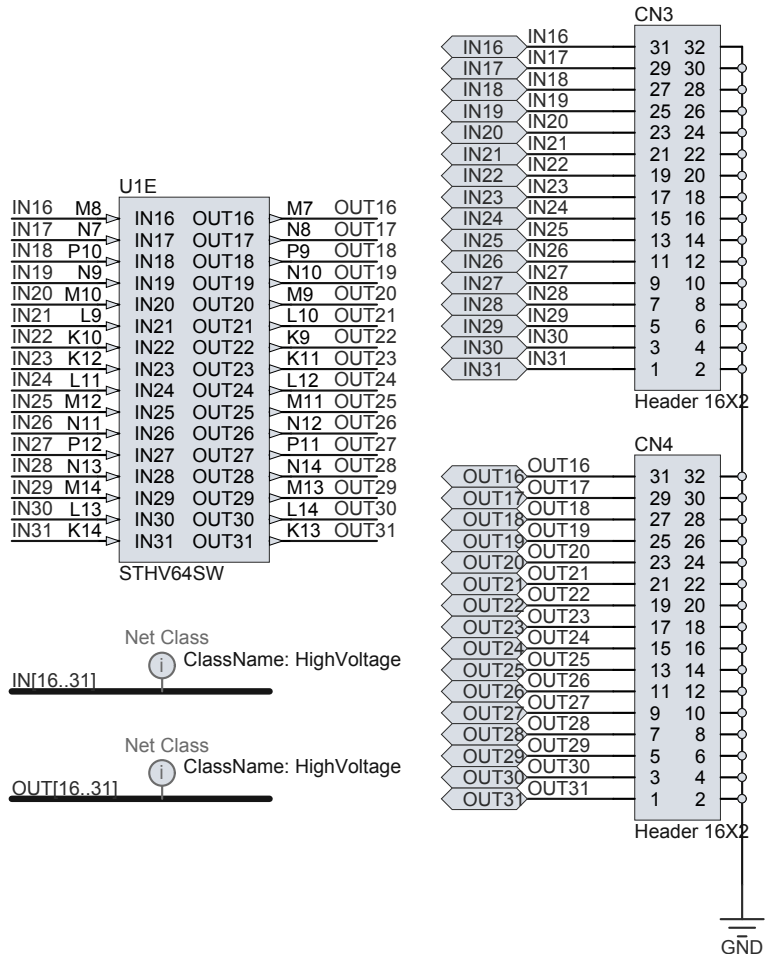


Figure 4. STEVAL-IME015V1 board schematic (4 of 6)

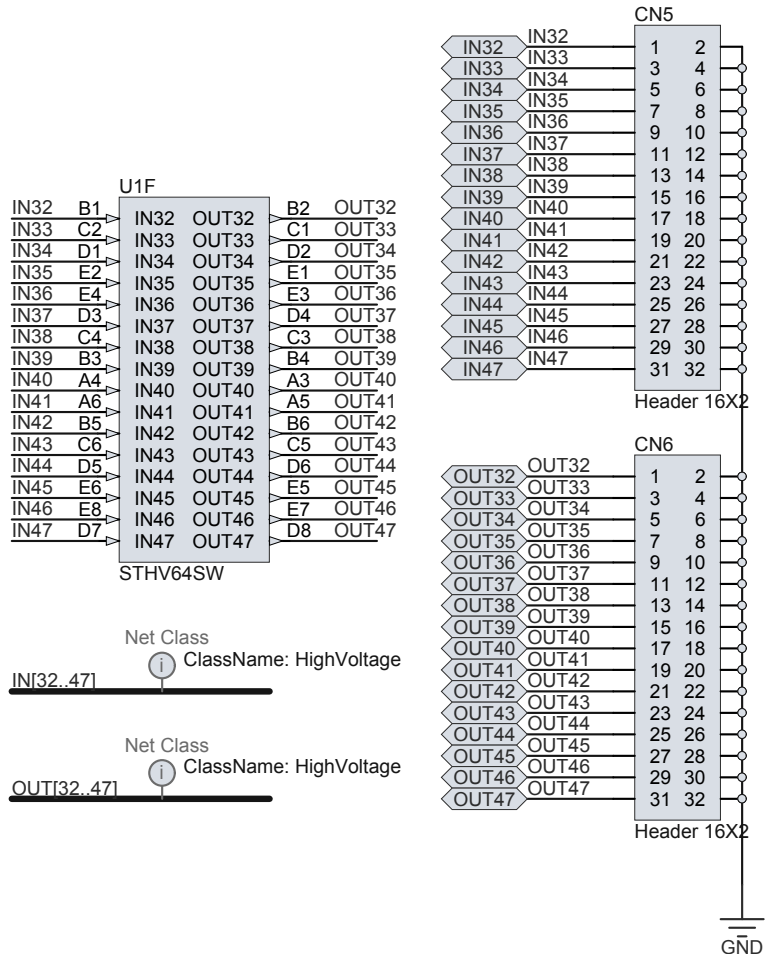


Figure 5. STEVAL-IME015V1 board schematic (5 of 6)

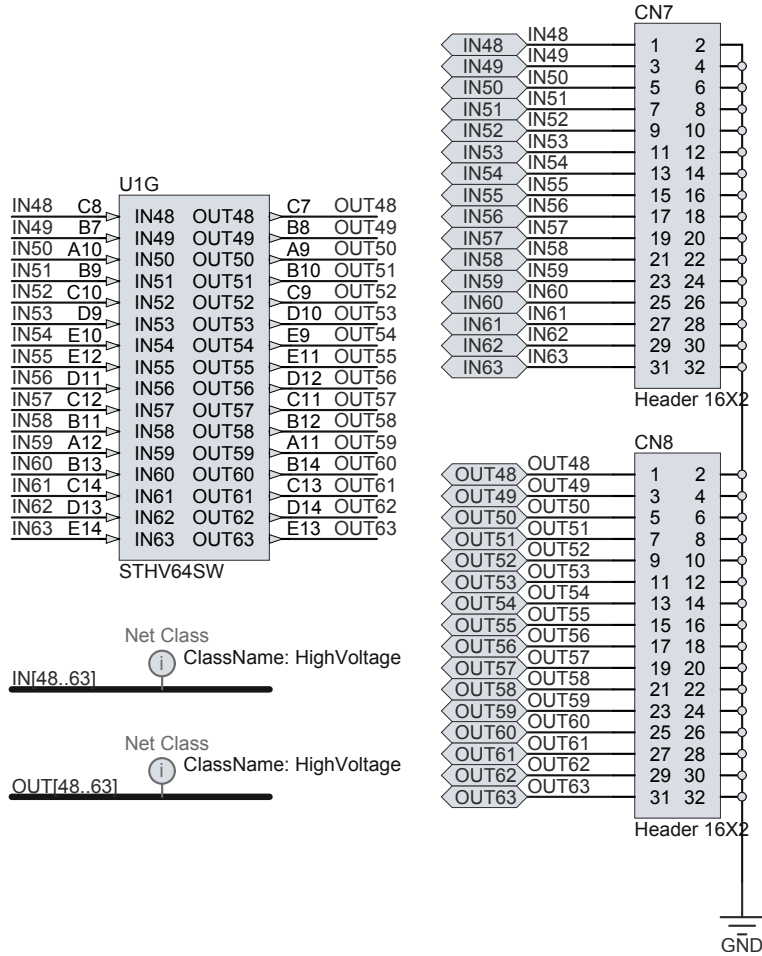
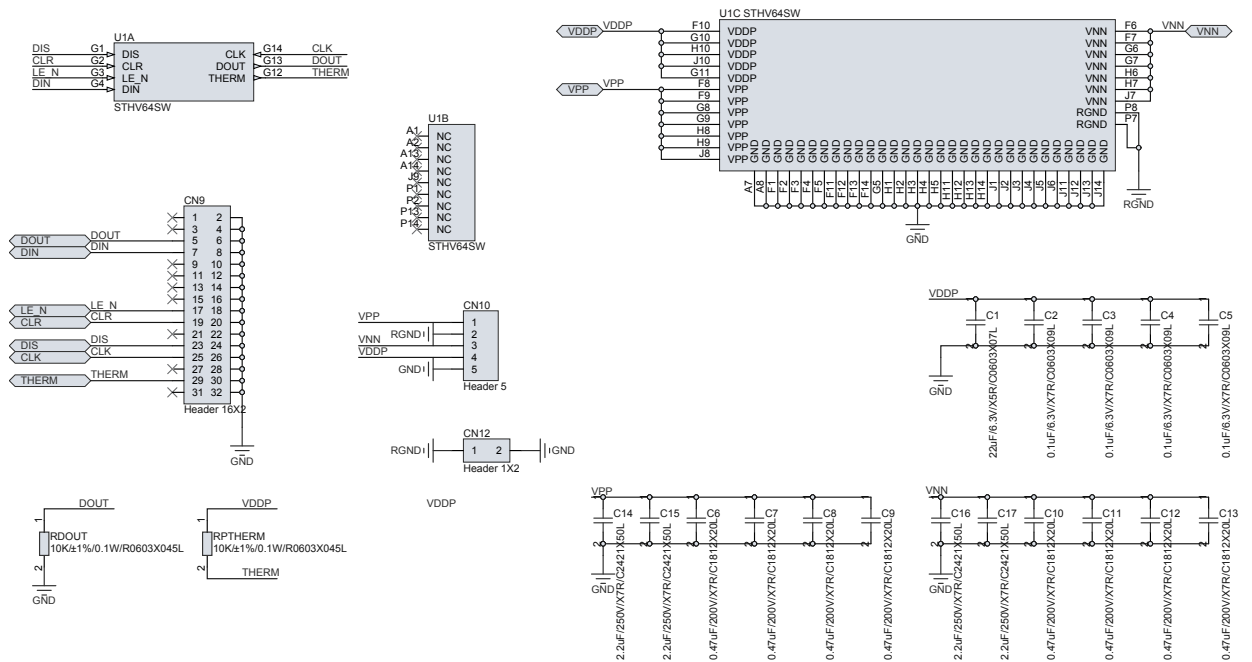


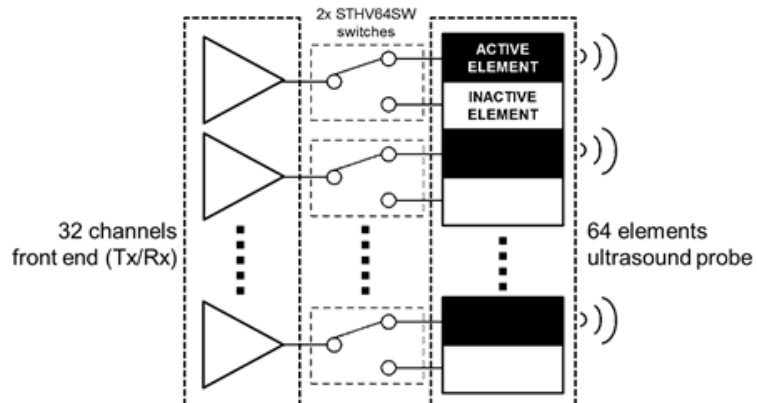
Figure 6. STEVAL-IME015V1 board schematic (6 of 6)



2 Typical application

A typical application of the STHV64SW is high voltage channel multiplexing, where it can drive, for example, a high number of probe elements. The figure below shows a single STHV64SW used to connect a 32 channel Tx/Rx front-end to a 64-element probe.

Figure 7. Typical application block diagram



Revision history

Table 1. Document revision history

Date	Version	Changes
04-Dec-2018	1	Initial release.

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