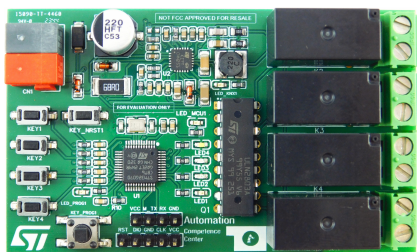


Design board for 4 channels KNX actuator device applications



The picture shown is for illustration purpose only.
Actual product may vary depending on buyer's selection and availability.

Features

- Input DC voltage: 21-32 VDC (KNX Bus)
- KNX 4 channels switch on/off input
- KNX 4 channels Relay output
- 4 keys and 4 LEDs indicator
- 4 Relays parameter: 12 V, 500 mW, Magnetic holding
- BUS control and manual control
- Adjustable parameter of action delay of each channel

Description

This **STEVAL-4KNXDVCB** is a designed board with **STKNX** as KNX device transceiver, low power **STM32G070CB** as main controller, **ULN2803A** as relay driver chip.

The **STEVAL-4KNXDVCB** runs with the KNX protocol.

With the use of **STKNX**, KNX signals can be transmitted between KNX BUS and MCU.

The microcontroller can be programmed by a dedicated SWD 5-pin connector.

The **ULN2803A** can provide an output voltage 50 V and current 500 mA.

This **STEVAL-4KNXDVCB** can use ETS software to set parameters to enable manual control and adjust action delay time of each channel.

Important:

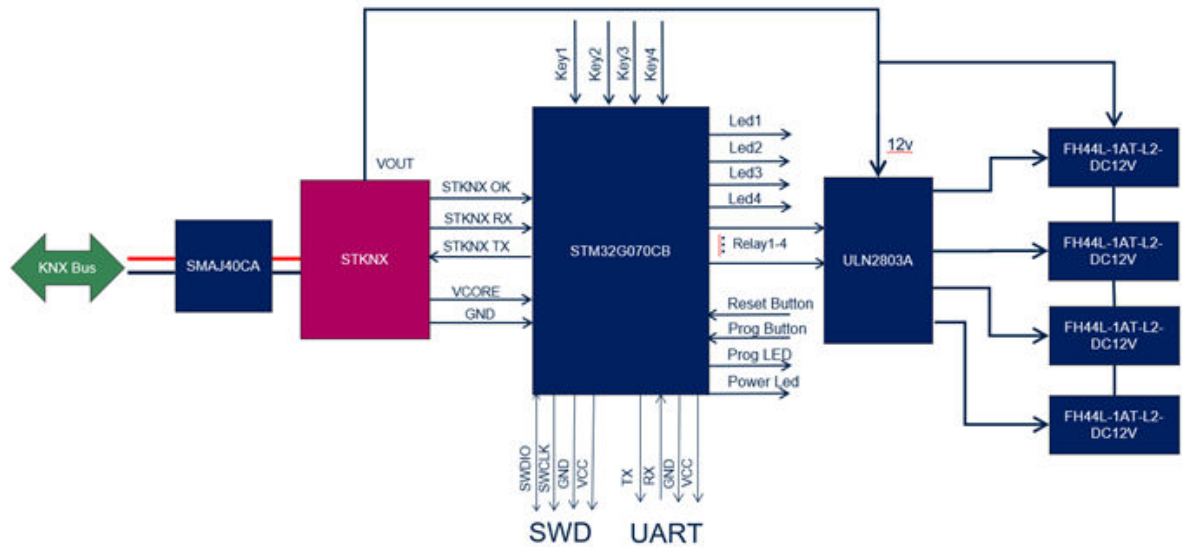
These evaluation boards are custom designed and built, in small quantities, according to specific requests from customers and are destined for evaluation and testing of ST products in a research and development setting. Please [contact ST](#) to provide your specific requests and get your custom built board(s).

Product summary	
Reference design board for 4-ch KNX Actuator Device applications	STEVAL-4KNXDVCB
Ultra-low-power Arm Cortex-M0+ MCU with 128 Kbytes of Flash memory, 64 MHz CPU	STM32G070CB
Transceiver device for KNX communication	STKNX
Transceiver device for KNX communication	ULN2803A
Applications	Smart Home/Building

1 Solution overview

The solution is based on a single MCU [STM32G070](#) and [STKNX](#) and uses the [ULN2803A](#) to drive four relays.

Figure 1. Solution overview



2 Schematic diagrams

Notice: These schematics are for illustration purpose only. Actual product may vary depending on buyer's selection and availability.

Figure 2. STEVAL-4KNXDVCB circuit schematic (1 of 3)

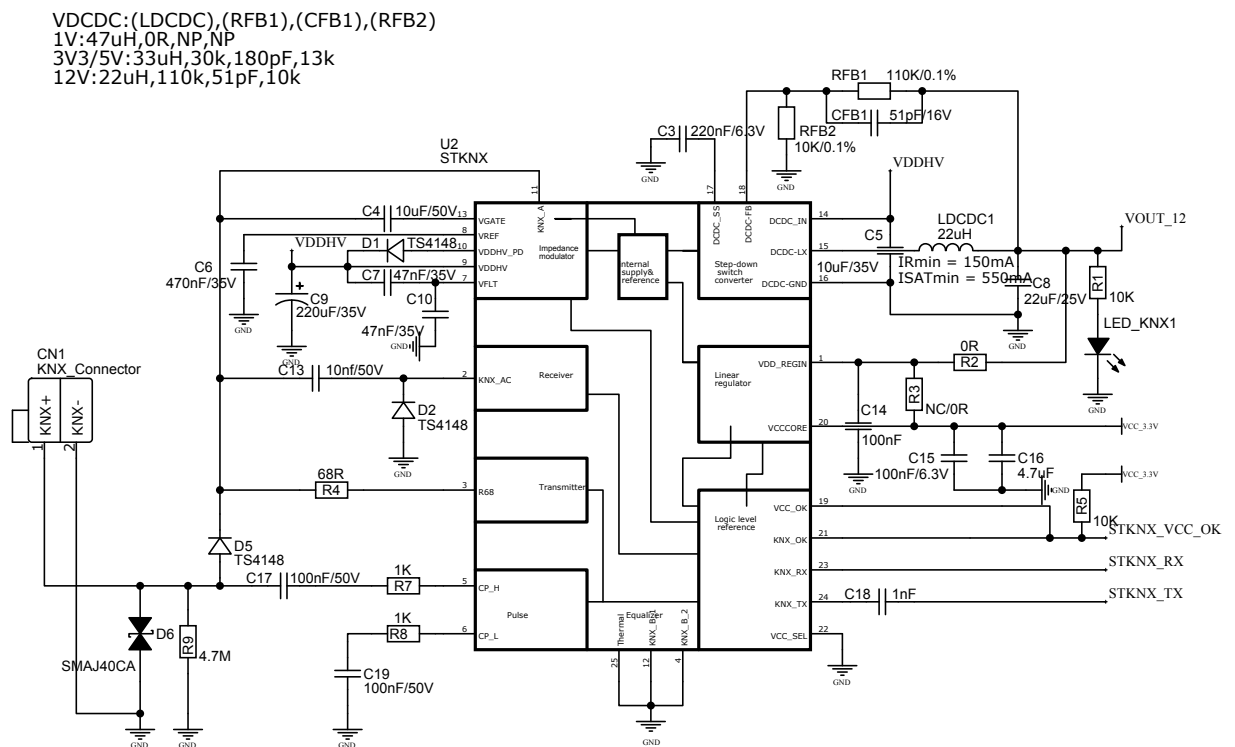


Figure 3. STEVAL-4KNXDVCB circuit schematic (2 of 3)

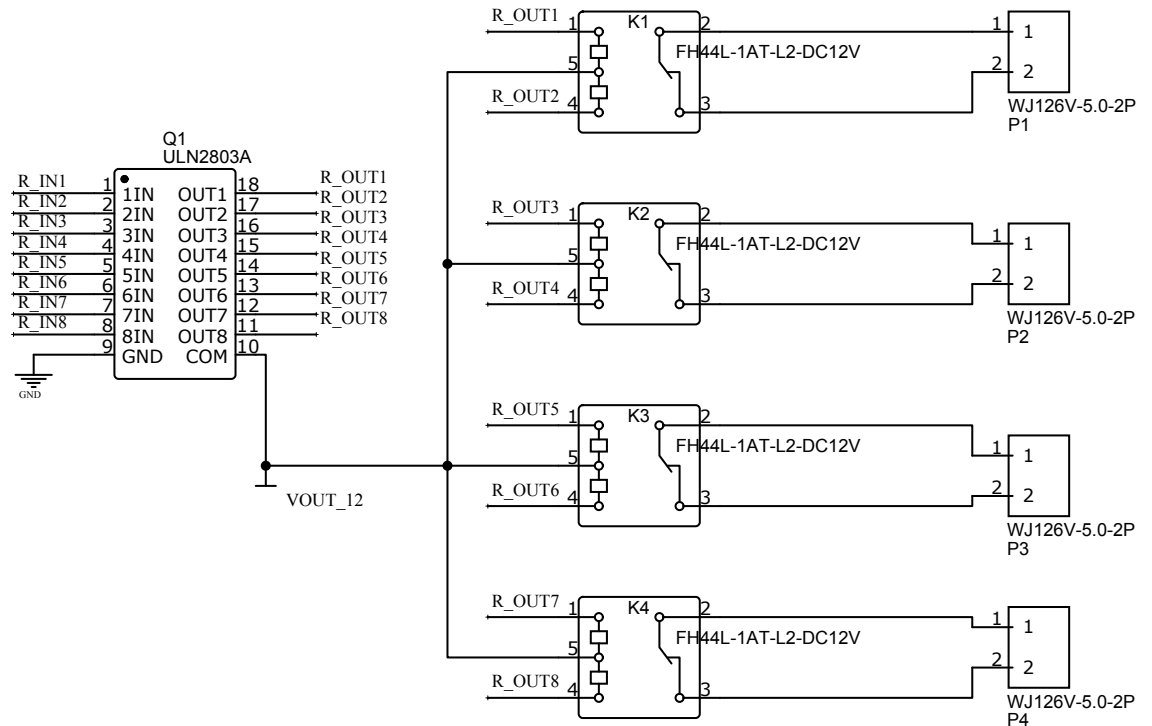
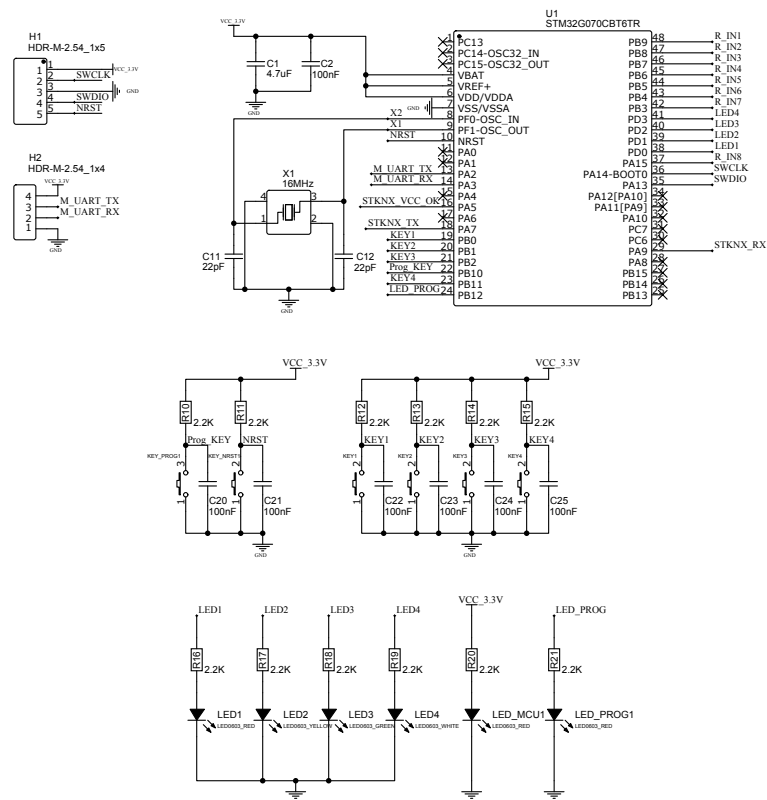


Figure 4. STEVAL-4KNXDVCB circuit schematic (3 of 3)



Revision history

Table 1. Document revision history

Date	Revision	Changes
08-Feb-2024	1	Initial release.
03-Apr-2024	2	Updated Section Description .

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