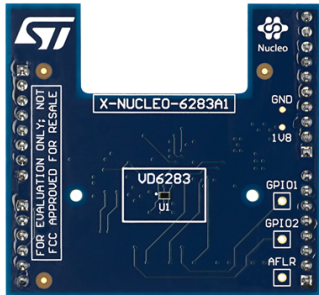


6-channel ambient light sensor, with flicker extraction expansion board based on VD6283 for STM32 Nucleo



Features

- VD6283 6-channel ambient light sensor (ALS) with advanced light flicker extraction
- Compatible with STM32 Nucleo board family
- Equipped with Arduino® UNO R3 connector
- RoHS compliant
- Full system software (SW) supplied, including code examples and graphical user interface. All this can be downloaded from the VD6283 product page on www.st.com

Description

The X-NUCLEO-6283A1 is an expansion board for the STM32 Nucleo development boards. It provides a complete evaluation kit allowing anyone to learn, evaluate and develop their applications using the VD6283, a color sensor with advanced light flicker frequency extraction.

The VD6283 (1.83 x 1.0 x 0.55 mm) is the smallest 6-channel, ambient light sensor (ALS) on the market. Light measurement is fast and accurate thanks to an individual ADC and readout circuitry for each color channel (Red, Green, Blue, IR, Clear and Visible). The VD6283 uses hybrid color filters with precise responses allowing accurate computation of the correlated color temperature (CCT) and Lux information. The VD6283 can be used for display brightness management or scene light correction. Additionally, the VD6283 can extract light flickering frequencies from 100 Hz to 2 kHz, including LED square signals.

The X-NUCLEO-6283A1 expansion board is compatible with the STM32 Nucleo-64 board family, and with the Arduino UNO R3 connector layout.

Several ST expansion boards can be superposed through the Arduino connectors, which allows, for example, the development of VD6283 applications with Bluetooth or Wi-Fi interfaces.

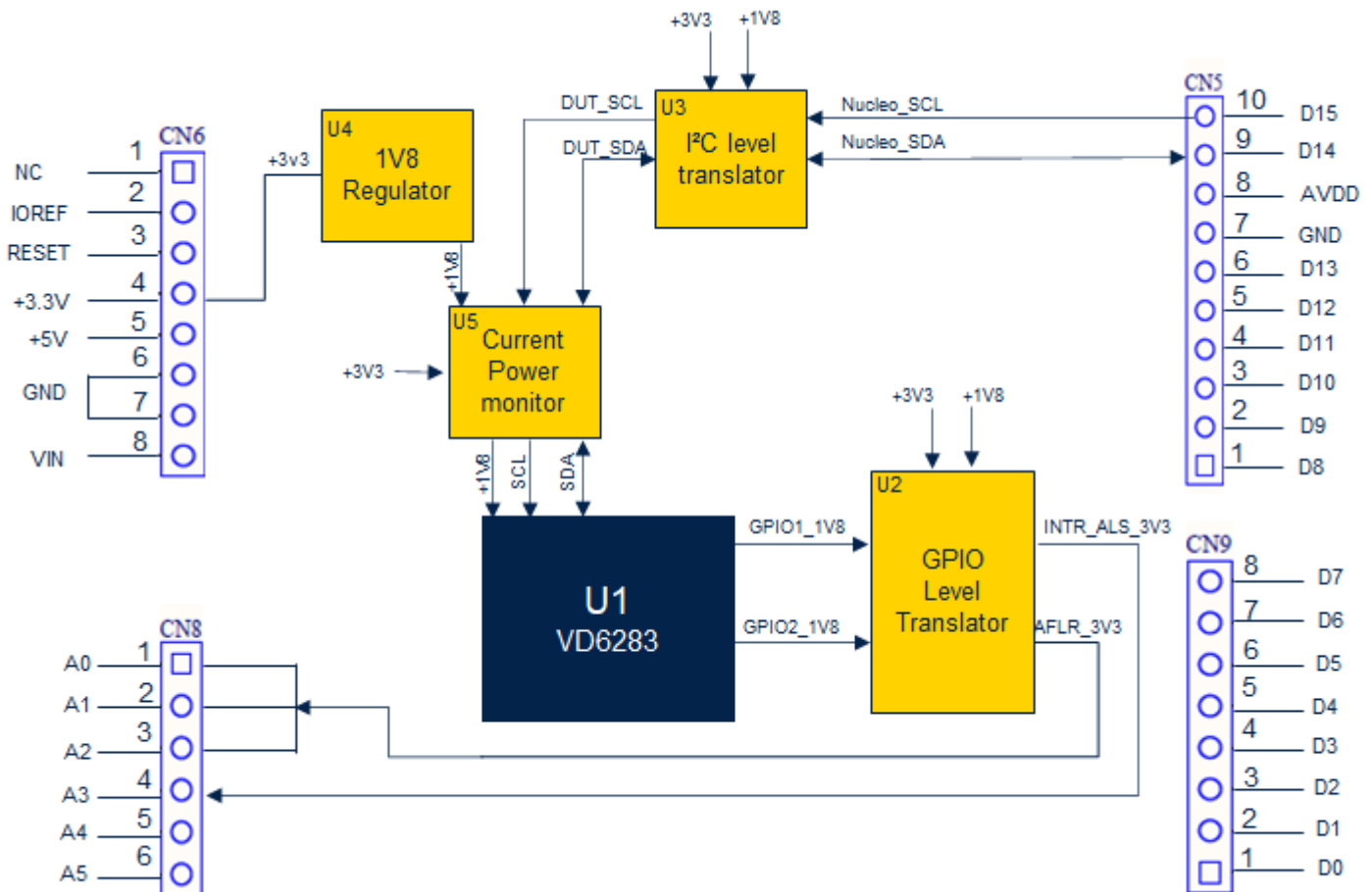


Order code	Description
X-NUCLEO-6283A1/	Expansion board for STM32 Nucleo board family

1 Block diagram

The figure below illustrates the X-NUCLEO-6283A1 expansion board features.

Figure 1. X-NUCLEO-6283A1 circuit diagram



2 Package information

In order to meet environmental requirements, ST offers these devices in different grades of **ECOPACK** packages, depending on their level of environmental compliance. ECOPACK specifications, grade definitions and product status are available at: www.st.com. ECOPACK is an ST trademark.

Revision history

Table 1. Document revision history

Date	Version	Changes
11-May-2021	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. For additional information about ST trademarks, please refer to www.st.com/trademarks. 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.

© 2021 STMicroelectronics – All rights reserved

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Multiple Function Sensor Development Tools](#) category:

Click to view products by [STMicroelectronics](#) manufacturer:

Other Similar products are found below :

[AS7022-EVALKIT](#) [P-NUCLEO-53L5A1](#) [X-NUCLEO-6283A1](#) [GX-F12A](#) [GX-F12A-P](#) [GX-F15A](#) [GX-F6A](#) [GX-F6A-P](#) [GX-F8B](#) [GX-H12A](#)
[GX-H12A-P](#) [GX-H6A-P](#) [1093](#) [MIKROE-2455](#) [MIKROE-2458](#) [MIKROE-2507](#) [MIKROE-2508](#) [MIKROE-2516](#) [MIKROE-2529](#) [1458](#) [DK-](#)
[20789](#) [MIKROE-1628](#) [176](#) [189](#) [1893](#) [ATQT4-XPRO](#) [GP30-DEMO MODULE](#) [910-28015A](#) [GX-F12AI-P](#) [GX-F15A-P](#) [GX-F8A](#) [GX-F8A-P](#)
[GX-H15A-P](#) [GX-H8A](#) [GX-H15A](#) [SDAWIR01](#) [AAS-AQS-UNO](#) [SDAWIR02](#) [SDAF01](#) [IQS620AEV04-S](#) [SMOD701KITV1](#) [DFR0131](#)
[DFR0165](#) [DFR0280](#) [SEN0213](#) [SEN0217](#) [SEN0219](#) [SEN0220](#) [SEN0231](#) [SEK002](#)