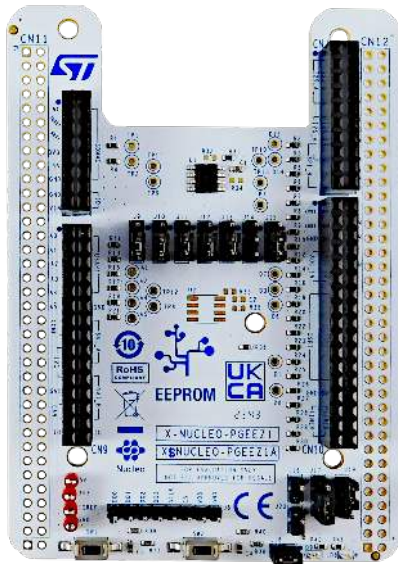


Standard SPI page EEPROM memory expansion board based on M95P32 series for STM32 Nucleo



Features

- Up to 32-Mbits SPI bus embedded page EEPROM
- 50 MHz read single output
- 80 MHz fast read single/dual/quad output with one dummy byte
- Page program with buffer load
- Ultra-low power consumption
- Free comprehensive development firmware library and sample implementation available when the X-NUCLEO-PGEEZ1 expansion board is plugged on top of a NUCLEO-F401RE, NUCLEO-L053R8, NUCLEO-G474RE, or NUCLEO-H743ZI development board
- Developer can choose and solder an EEPROM to be tested using the evaluation software provided

Description

The X-NUCLEO-PGEEZ1 expansion board is designed for the M95P32 series SPI page EEPROM for data reading and writing.

This expansion board allows developers to evaluate the new memory page EEPROM through a single/dual/quad SPI interface.

It acts as an external storage device that can be used to store data, such as manufacturing traceability, calibration, user settings, error flags, data logs, and monitoring data to build more flexible and accurate applications.

The X-NUCLEO-PGEEZ1 expansion board can be plugged on top of an STM32 Nucleo-144 (via ZIO connectors) or STM32 Nucleo-64 (via Arduino® UNO R3 connectors).

Product summary	
Standard SPI page EEPROM memory expansion board based on M95P32 series for STM32 Nucleo	X-NUCLEO-PGEEZ1
STM32 Nucleo-64 development board with STM32F401RE MCU	NUCLEO-F401RE
STM32 Nucleo-64 development board with STM32L053R8 MCU, supports Arduino and ST morpho connectivity	NUCLEO-L053R8
STM32 Nucleo-64 development board with STM32G474RE MCU, supports Arduino and ST morpho connectivity	NUCLEO-G474RE
STM32 Nucleo-144 development board with STM32H743ZI MCU,	NUCLEO-H743ZI

Product summary	
supports Arduino, ST Zio and morpho connectivity	
Applications	Industrial Sensors

1 Schematic diagrams

Figure 1. X-NUCLEO-PGEEZ1 circuit schematic (1 of 4)

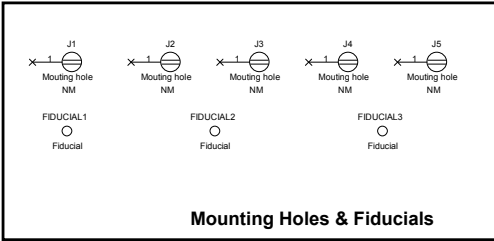
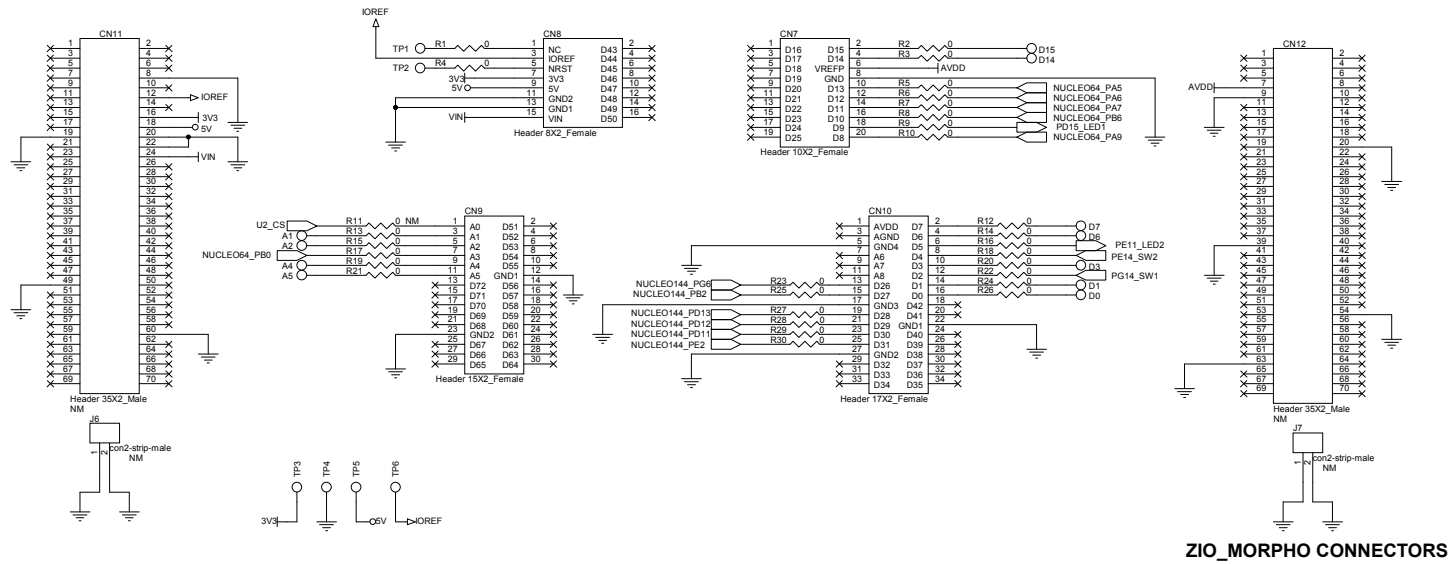


Figure 2. X-NUCLEO-PGEEZ1 circuit schematic (2 of 4)

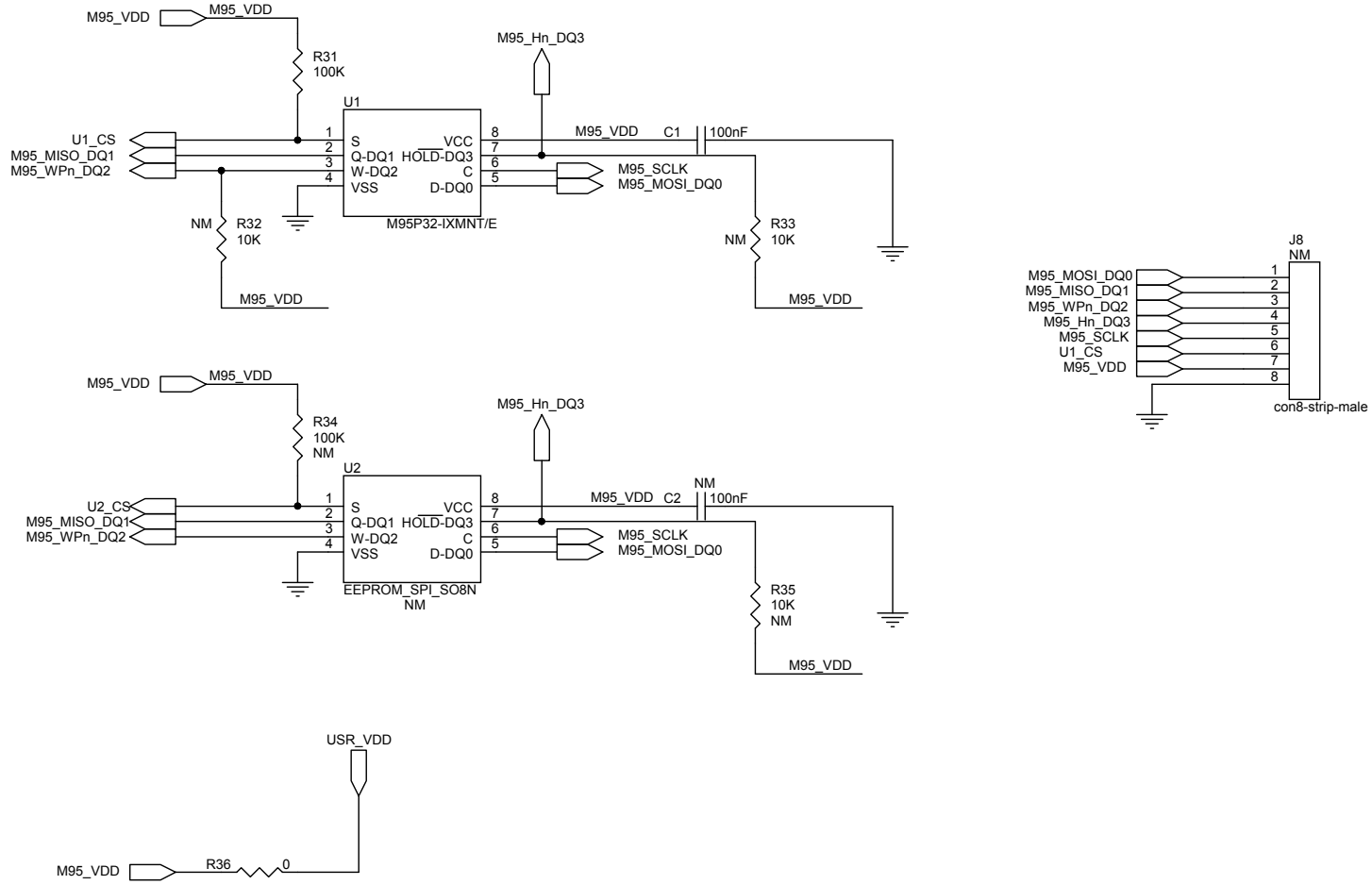
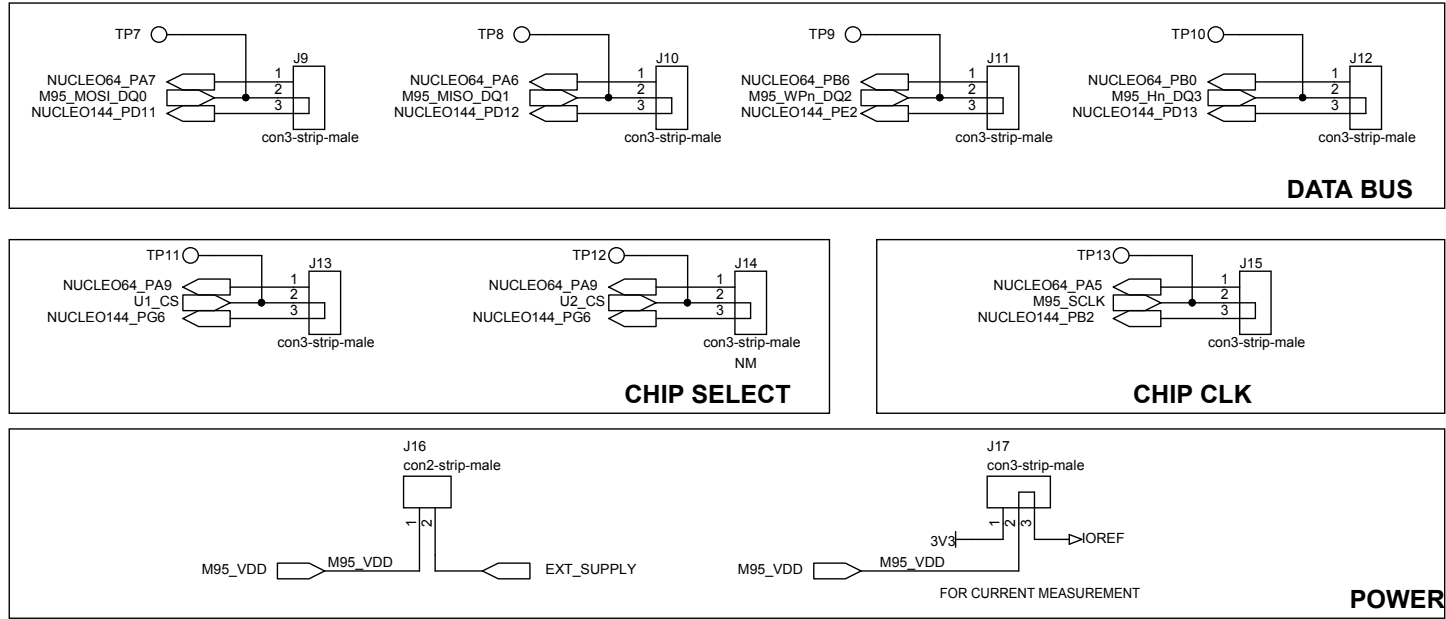


Figure 3. X-NUCLEO-PGEEZ1 circuit schematic (3 of 4)

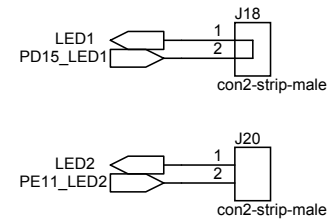
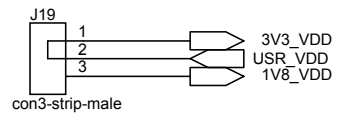
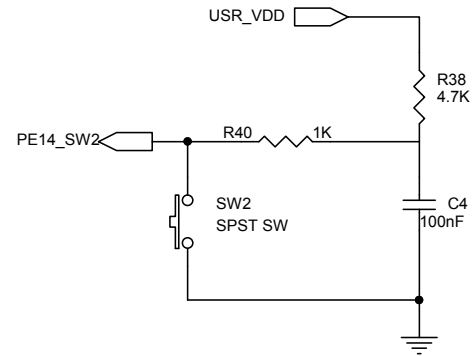
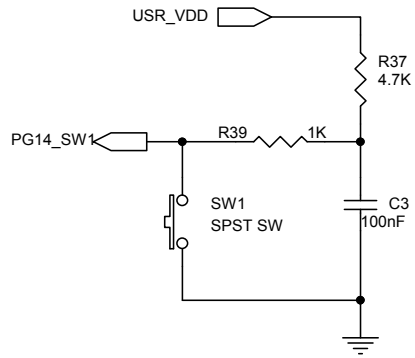


	J16	J17
1.External Supply	Short 1 and 2	Connectors to be left open
1.IOREF	Unshort 1 and 2	Short 2 and 3 (default)
3.3V3	Unshort 1 and 2	Short 1 and 2

	NUCLEO-144	NUCLEO-64
U1 (J13)	Short 2 and 3	Short 1 and 2
U2 (J14) No Jumper on J13	Short 2 and 3	Short 1 and 2



Figure 4. X-NUCLEO-PGEEZ1 circuit schematic (4 of 4)



IOREF as 3V3 (As per JP5 on NUCLEO H743ZI)	SHORT 1 & 2 of J19 Default	SHORT 1 & 2 of J18 (UNSHORT 1 & 2 of J20) Default
IOREF as 1V8 (As per JP5 on NUCLEO H743ZI)	SHORT 2 & 3 of J19	SHORT 1 & 2 of J20 (UNSHORT 1 & 2 of J18)



2 Board versions

Table 1. X-NUCLEO-PGEEZ1 versions

PCB version	Schematic diagrams	Bill of materials
X\$NUCLEO-PGEEZ1A ⁽¹⁾	X\$NUCLEO-PGEEZ1A schematic diagrams	X\$NUCLEO-PGEEZ1A bill of materials

1. This code identifies the X-NUCLEO-PGEEZ1 expansion board first version. It is printed on the board PCB.

Revision history

Table 2. Document revision history

Date	Revision	Changes
17-Nov-2022	1	Initial release.

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