

Datasheet

SKN11 Minimal Stand-Alone Module Adapter

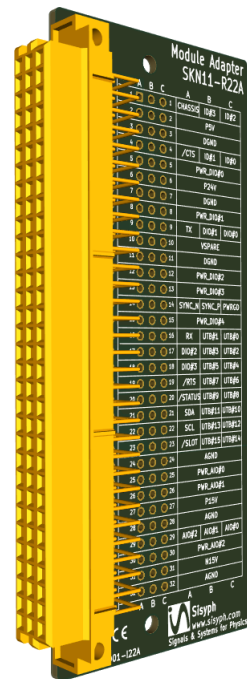
SK-Series Modules

Features

- Mating all SK-Series modules
- DIN41612-R96 connector breakout board
- Connections through 96 solder pads
- Fast wiring of power supplies, communications lines. . .

Applications

- Stand-alone instrument interface
- Rapid prototyping
- Sub-system assembly



General Description

Overview

The SKN11 *Minimal Stand-Alone Module Adapter* is intended for use with SK-Series modular instruments. These modules can be operated stand-alone or within a platform where several modules can be assembled to configure a specific control or measurement system. Indeed, SPK-Series platforms accommodate up to eight instruments and provide power, clock synchronization, communications, and module status. In order to operate a single instrument stand-

alone, *Signals and Systems for Physics* provides the user with the SKN11 *Minimal Stand-Alone Module Adapter*. It is very convenient for wiring all required power supplies, module's I/O or communications interfaces. Fast and reliable wiring is provided through 96 solder pads that can be used to access all lines of the DIN41612 connector. Required power supplies and UART RX- and TX-lines can be thus easily wired during prototyping. This adapter can be also used for assembling SK-Series module as sub-system.

Wiring

Functional Block Diagram

Refer to the *Functional Block Diagram* available online for a synthetic presentation of the SKN11.

Pin Assignments

CAUTION – *Misapplication of power may cause damage of the module.*

The required power supplies must be connected using the dedicated solder pads. Refer to the instrument’s datasheet for detailed information on the power consumption.

CAUTION - *Because SK-Series modular instruments may use some power supplies without any local post-regulation circuitry, always use clean, well regulated power sources with adjustable current limitation.*

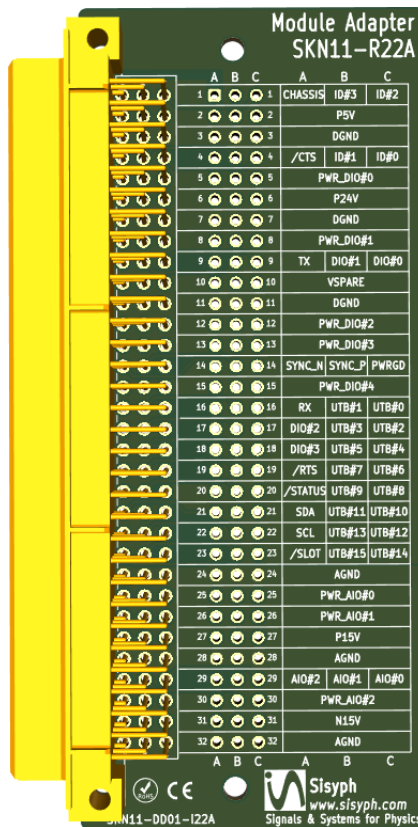


Figure 1: View of the SKN11. The wiring of the module’s lines should be straightforward as the solder pads array simply duplicates the positions of connector’s pins, and a second array is used to indicate the name of the related pin.

General Characteristics

The adapter is designed to be operated in laboratory environment.

Operating Temperature

Range +15 °C to +40 °C,
 non-condensing.

Connectors

Module DIN41612 96R female (1x).

Printed Circuit Board

Dimensions 100 × 40 × 1.6 mm.
Technology 2-layer, improved FR-4.
Board Weight ≈ 40 g.

Warranty

One (1) year parts and labor on defects.

Ordering Information

SKN11 Module

| | |
|-------------------------------|--|
| Ordering Code SKN11 | Front-Panel Options Minimal Stand-Alone Module Adapter |
|-------------------------------|--|

Certification

Signals and Systems for Physics certifies that this product met its published specifications at the time of shipment.

Safety and Preparation for Use

The SKN11 *Minimal Stand-Alone Module Adapter* is not designed, intended, or sold for use in hazardous environments requiring fail-safe operation, including without limitation, operation of nuclear facilities, aircraft or spacecraft control systems, and life support or weapons systems. The user must assure that any failure or misapplication of the SKN11 *Minimal Stand-Alone Module Adapter* cannot lead to a consequential failure of any interconnected equipment that could lead to loss of life or limb, or property damage.

The illustrations, charts, and discussions shown in this manual are intended solely for purposes of example. Since there are many variables and requirements associated with any particular control application, *Signals and Systems for Physics* does not assume responsibility or liability for actual use based upon the examples shown in this publication.

The SKN11 *Minimal Stand-Alone Module Adapter* is designed to be used with an SK-Series modular instrument. Do not turn on the power to the adapter or apply voltage inputs to the module until the module is completely mated. Do not exceed the specified voltages at any input or output line.

Document Identifier

This document is identified by SKN11-SU01-P24A.

Document Revision History

P24A (2024-09-03)

Initial version.

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