The manufacturer may use the mark:

CERTIFIED · exida · SIL 3 CAPABLE · IEC 61508
FS

Revision 4.0 November 10, 2020
Revision 4.1 January 18, 2024
Surveillance Audit Due
June 1 , 2024

ANAB
ANSI National Accreditation Board
A C C R E D I T E D
ISO/IEC 17065
PRODUCT CERTIFICATION BODY
#1004

Certificate / Certificat
Zertifikat / 合格証

RAD 1406037 C001

exida hereby confirms that the:

FPGA-Based Safety Controller (FSC) RadICS

RPC Radiy

29 Geroyiv Stalingrada Street
Kropyvnytskyi, Ukraine

Has been assessed per the relevant requirements of:

IEC 61508 : 2010 Parts 1-3

and meets requirements providing a level of integrity to:

Systematic Capability: SC 3 (SIL 3 Capable)

Random Capability: Type B Element

SIL 3 @ HFT=0; Route 1_H

PFD_{AVG}, PFH and Architecture Constraints must be verified for each application
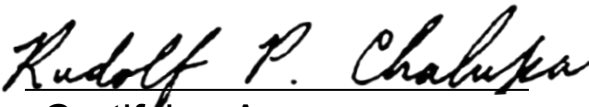
Safety Function:
The FSC will read input signals, perform user-defined application layer logic and write results to the output signals within the stated response time.

Application Restrictions:
The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.

David Smith (signature)
Evaluating Assessor

Rudolf P. Chalupa (signature)
Certifying Assessor

Certificate / Certificat / Zertifikat / 合格証

RAD 1406037 C001

Systematic Capability: SC 3 (SIL 3 Capable)

Random Capability: Type B Element

SIL 3 @ HFT=0; Route 1_H

**PFD_{AVG}, PFH and Architecture Constraints
must be verified for each application**

FPGA-Based Safety Controller (FSC) RadICS

Systematic Capability:

The product has met manufacturer design process requirements of Safety Integrity Level (SIL) 3. These are intended to achieve sufficient integrity against systematic errors of design by the manufacturer.
A Safety Instrumented Function (SIF) designed with this product must not be used at a SIL level higher than stated.

Random Capability:

The SIL limit imposed by the Architectural Constraints must be met for each element.

For failure rates, see the Safety Manual.

SIL Verification:

The Safety Integrity Level (SIL) of an entire Safety Instrumented Function (SIF) must be verified via a calculation of PFH/PFD_{avg} considering redundant architectures, proof test interval, proof test effectiveness, any automatic diagnostics, average repair time and the specific failure rates of all products included in the SIF. Each element must be checked to assure compliance with minimum hardware fault tolerance (HFT) requirements.

exida®

80 N Main St
Sellersville, PA 18960

The following documents are a mandatory part of certification:

Assessment Report: RAD 14-06-037 R002 V4R0 61508 Assessment - FSC

Safety Manual: Radiy FSC Product Safety Manual