

SR4210PCB CryptoAuthentication™

Extension Board



The power of memory. Secured.

The SR4210PCB CryptoAuthentication™ extension board allows Datakey CryptoAuthentication memory tokens to be used with Microchip's CryptoAuthentication SOIC XPRO Starter Kit (Microchip part number DM320109). Specifically, the extension board plugs into the 20-position extension port connectors (EXT1, EXT2, EXT3) on the Microchip ATSAM21-XPRO development board (included in the starter kit). Due to the width of the SR4210PCB receptacle, it is not possible to connect two of these extension boards into ports EXT1 and EXT2 at the same time. The Datakey SR4210PCB extension board may be ordered directly from ATEK or through an authorized Datakey distributor. The Microchip CryptoAuthentication starter kit may be ordered from Microchip Direct or through an authorized Microchip distributor.

Datakey CryptoAuthentication memory tokens (e.g. IAT4.5Kb) may be plugged directly into the SR4210PCB receptacle (J1). This right-angle board-edge receptacle is ideal for enclosures where it is desired to insert the token along the narrow side of an enclosure. A 10-pin header connector (J2) allows for the use of a Datakey SlimLine™ panel-mount receptacle. This gives maximum flexibility for locating the receptacle.

Custom firmware is available for the ATSAM21-XPRO development board that demonstrates how the /LOFO line can be tied to an interrupt line and detect when a Datakey CryptoAuthentication token has been inserted or removed. LOFO stands for Last On First Off and is used for token detection. This custom firmware and associated files and instructions may be downloaded from the Datakey website.

MECHANICAL	
Operating Life (SR4210PCB receptacle)	50,000 Insertion/Removal Cycles Min.
ELECTRICAL	
Power	3.3 V or 5.0 V Supplied Through Extension Header
I ² C	See Pinout Chart Below
ENVIRONMENTAL	
Storage Temperature	-18°C to +66°C
Operating Temperature	-18°C to +66°C
RoHS Compliant	Yes ¹
MATING COMPONENT(S)	
SR4210PCB Receptacle (J1)	IAT4.5Kb, IAX4.5Kb, IAT10.5Kb and IAX10.5Kb Memory Tokens
10 Pos. Vertical Female Header (J2)	Datakey SlimLine™ Panel-Mount Receptacles Via 10-Conductor Ribbon Cable (part number 503-0049-008A)
20 Pos. RA Female Header (J3)	Microchip ATSAM21 XPRO Extension Port
ORDERING INFORMATION ¹	
SR4210PCB Extension Board	607-0087-000A

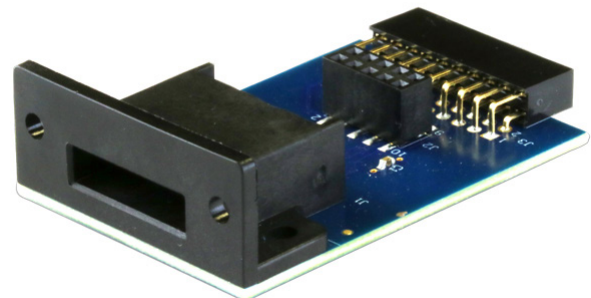
1: "A" suffix on part number indicates RoHS compliance. See CE declaration below for details.

NOTES:

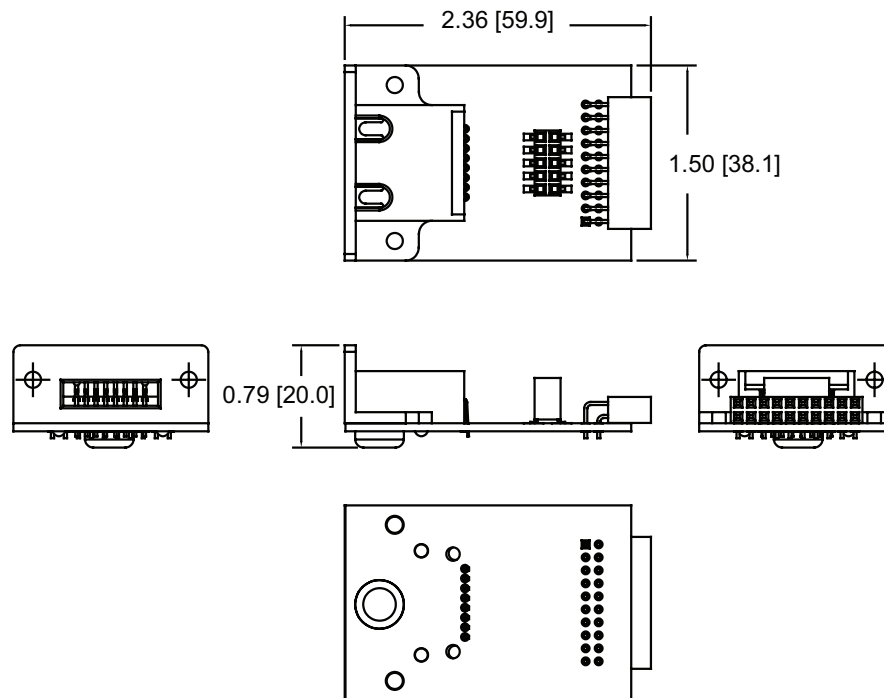
- Conforms with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011, and as amended by Directive 2015/863/EU, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



 **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov



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Drawing dimensions are in inches and millimeters [mm].
Dimensions are nominal and subject to manufacturer's tolerances.

PINOUT CHART				
Signal I ² C	EXT1Name	EXT1 Pin	SR4210PCB Pin	Header Pin
LOFO	PB06	5	1	10
Power (Vcc)	VCC	20	2	2
Size	NC	NC	3	NC
Serial Clock (SCL)	PA09	12	4	7
NC	NC	NC	5	NC
Serial Add/Data (SDA)	PA08	11	6	8
Ground (GND)	GND	2,19	7	3
LOFO	PB06	5	8	10

CryptoAuthentication is a trademark of Microchip Technology Incorporate in the U.S.A and in other countries and is used under licence.

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View our full product line at www.datakey.com

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