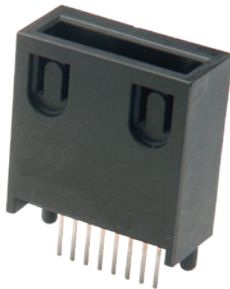# SR4220VRT
Board-Mount Receptacle

Datakey®

The power of memory. Secured.

The SR4220VRT board-mount receptacle mates with all Datakey SlimLine™, Extended SlimLine, NFX and RUGGEDrive™ memory tokens (see token datasheets for more details). The SR4220VRT is a vertical, board-mount receptacle. For right-angled board-edge designs, see the SR4220PCB and SR4220SMT receptacles.

As with all Datakey SlimLine token receptacles, this series features corrsoion-resistant, "gold dot" contacts that perform reliably over a wear life of at least 50,000 insertion/removal cycles. The design employs a wiping mechanism to remove any debris or build-up on the token's contacts each time the token is inserted or removed. The receptacle includes a detent mechanism that contributes to token retention and gives users tactile and audible confirmation when an inserted token is physically engaged. The token/receptacle system also provides a Last-On/First-Off (LOFO) contact that is used by system designers to detect when a memory token has been inserted or removed (contact ATEK Access Technologies for token detection details for the NFX and RUGGEDrive memory tokens).

MECHANICAL	
Contact Life	50,000 Insertion/Removal Cycles Min.
Insertion Force	400 gf Min. / 2 kgf Max.
Removal Force	300 gf Min. / 2 kgf Max.
Vibration	15 g (three axes) Non-operating

ELECTRICAL	
Contact Resistance	Beginning of Life: 100 mΩ
	End of Life: 500 mΩ

ENVIRONMENTAL	
Storage Temperature	-40°C to +105°C
Operating Temperature	-40°C to +85°C
Relative Humidity	5% to 95% (non-condensing)

MATING COMPONENT(S)	
Tokens	All SlimLine, NFX, DFX and UFX Tokens

ORDERING INFORMATION[1]	
SR4220VRT	606-0055-003A

1: "A" suffix on part number indicates RoHS compliance. See CE declaration below for details.
2: Customers must design to meet Datakey interface specifications to provide for future memory device compatibility. Interface specifications available at datakey.com.
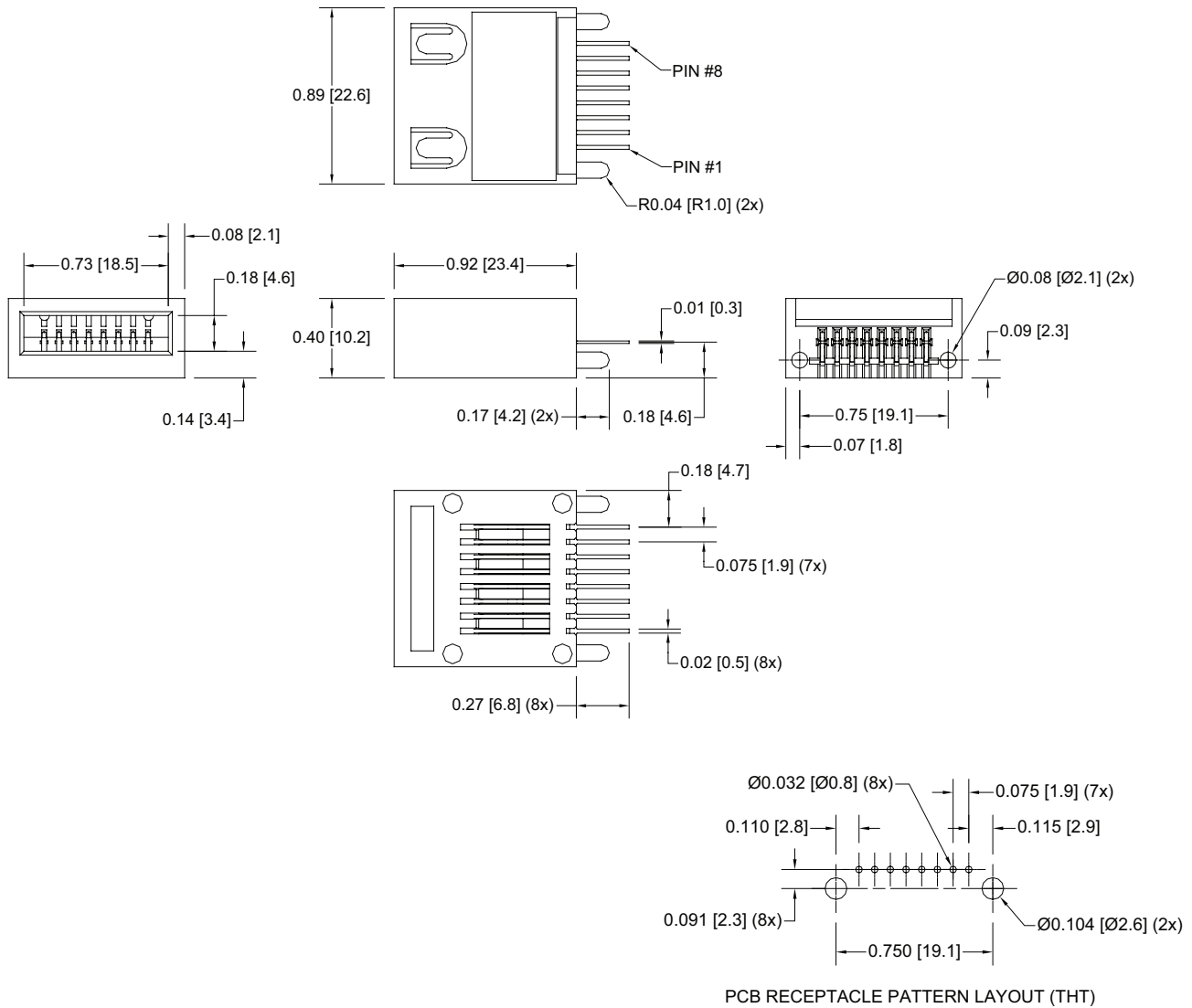3: RST signal used on IIT Series only.
NOTES:
Conforms with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011, and as amended by Directive 2015/863/EU, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

CE

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

SR4220VRT
(Through-hole Technology)

PIN-OUT CHART[2]					RUGGEDRIVE™ LINE		
Pin	Microwire	I²C	SPI	NFX	DFX (SPI)	DFX (SD)	UFX (USB)
Pin 1	LOFO	LOFO	/Hold	DP (USB)	Reserved	DAT1	NC
Pin 2	Power (V$_{cc}$)	Power (V$_{cc}$)	Power (V$_{cc}$)	Power (V$_{cc}$)	Data Out (DO)	DAT0	+5V
Pin 3	Chip Select (CS)	SIZE / RST[3]	/Chip Select (/CS)	/Chip Select (/CS)	Ground (GND)	VSS	NC
Pin 4	Serial Clock (SK)	Serial Clock (SCL)	Serial Clock (SCK)	Serial Clock (SCK)	Serial Clock (SCLK)	CLK	DM
Pin 5	Data In (DI)	NC	Data In (SI)	MOSI	Power (V$_{cc}$)	VDD	DP
Pin 6	Data Out (DO)	Serial Add/Data (SDA)	Data Out (SO)	MISO	Data In (DI)	CMD	NC
Pin 7	Ground (GND)	Ground (GND)	Ground (GND)	Ground (GND)	/Chip Select (/CS)	DAT3	GND
Pin 8	LOFO	LOFO	LOFO	DM (USB)	Reserved	DAT2	NC

NC = No Connection

Datakey®

The power of memory. Secured.

PIN #8

PIN #1

R0.04 [R1.0] (2x)

0.89 [22.6]

0.08 [2.1]

0.73 [18.5]

0.18 [4.6]

0.14 [3.4]

0.92 [23.4]

0.40 [10.2]

0.01 [0.3]

0.17 [4.2] (2x)

0.18 [4.6]

Ø0.08 [Ø2.1] (2x)

0.09 [2.3]

0.75 [19.1]

0.07 [1.8]

0.18 [4.7]

0.075 [1.9] (7x)

0.02 [0.5] (8x)

0.27 [6.8] (8x)

Ø0.032 [Ø0.8] (8x)

0.075 [1.9] (7x)

0.110 [2.8]

0.115 [2.9]

0.091 [2.3] (8x)

Ø0.104 [Ø2.6] (2x)

0.750 [19.1]

PCB RECEPTACLE PATTERN LAYOUT (THT)

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

View our full product line at www.datakey.com

ATEK Access Technologies

Access the power of technology.