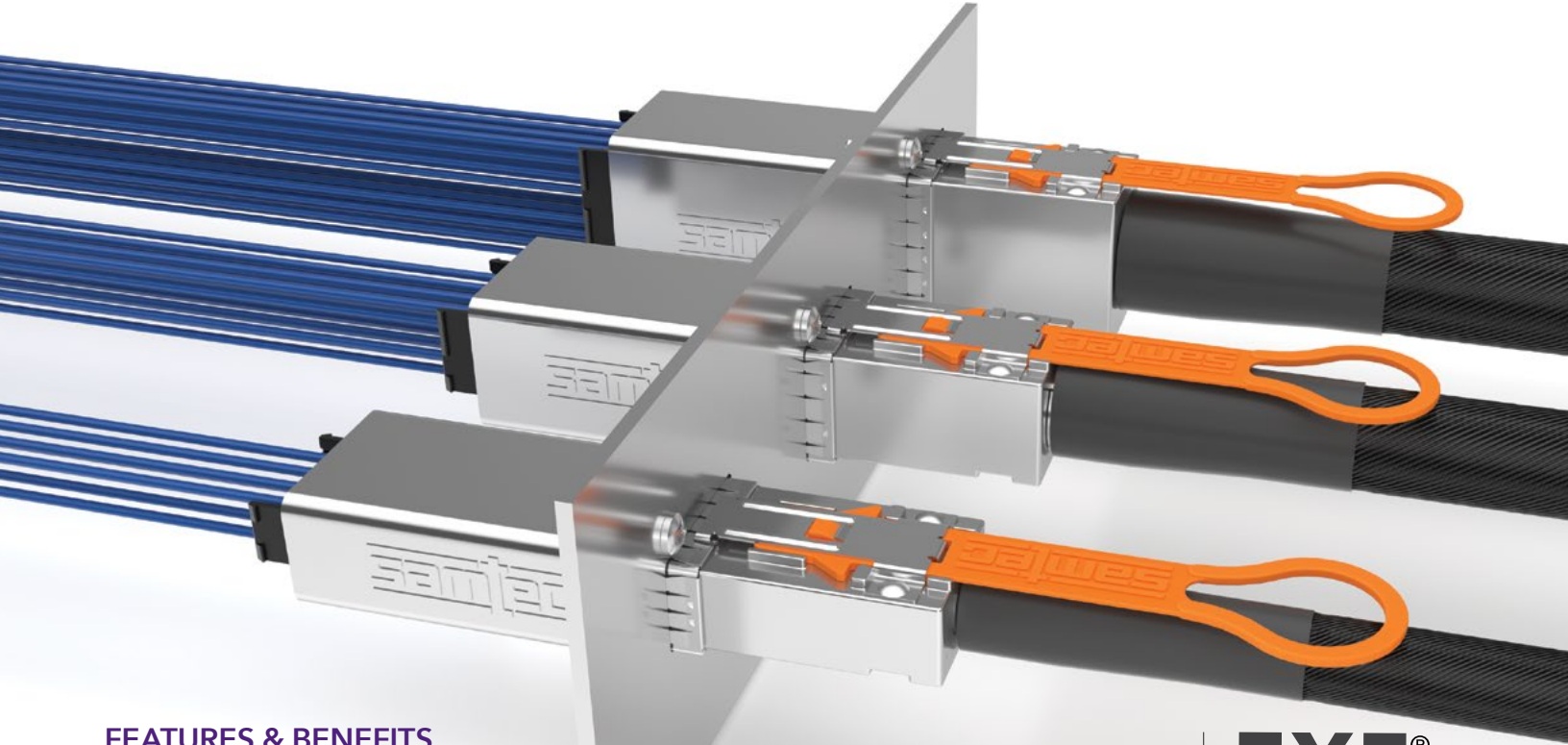# NOVARAY® I/O

# EXTREME PERFORMANCE PANEL MOUNT I/O ASSEMBLIES

FEATURES & BENEFITS

- 16 & 32 differential pair configurations – Accommodates x4 or x8 plus sidebands
- Cable-to-Cable bulkhead panel connection using Flyover® Cable Technology
- External Cable: 28, 30 or 34 AWG twinax
- Internal Cable: 34 AWG twinax
- Single-Ended coax options also available
- Full external EMI shielding
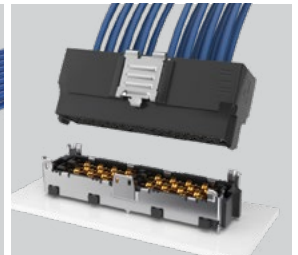- Multiple end 2 high-speed connector options
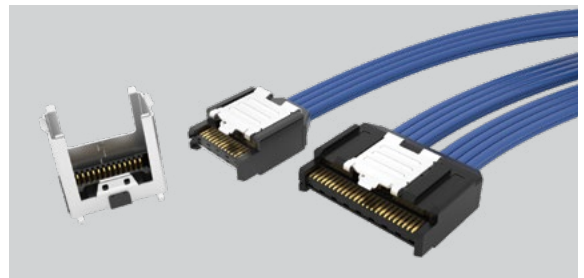
NOVARAY® I/O | EYE® SPEED CABLE

VARIOUS END 2 OPTIONS AVAILABLE
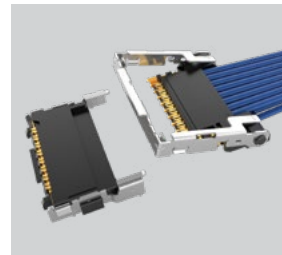
Si-Fly™

NovaRay®

PAM4 112 Gbps	TARGETED CONFIGURATIONS	AGGREGATE DATA RATE
	8 Pair (In Development)	896 Gbps
	16 Pair	1792 Gbps
	32 Pair	3584 Gbps
PCI EXPRESS® GEN 6 COMPATIBLE	x4 (8 Pair + PCIe® Sidebands)	512 Gbps
	x8 (16 Pair + PCIe® Sidebands)	1024 Gbps

AcceleRate®

NOVARAY® I/O

PAM4 112 Gbps

samtec

EXTREME PERFORMANCE I/O CABLE

NVACE	–	SIGNAL TYPE	–	CABLE TYPE	–	ROWS	–	CABLE LENGTH	–	END 2	–	PIN OUT	–	SPEED

SIGNAL TYPE

–DP
= Differential (twinax pairs only)

–SE
= Single ended (coax signals only)

CABLE TYPE

–1
= 34 AWG, 100 Ω twinax

–5
= 28 AWG, 100 Ω twinax

–6
= 34 AWG, 50 Ω coax (-SE only)

ROWS

–4
= 4 row

–8
= 8 rows

CABLE LENGTH

–X.X
= Length in meters 0.5 meters (19.68") minimum

END 2

–A
= NVACE

PIN OUT

–1
= Pin A01 to Pin A01

–2
= Pin A01 to Pin N

SPEED

(Differential twinax pairs only)

–1
= 56G PAM4

–2
= 112G PAM4

PRELIMINARY

NVACE
Cable Mates: NVACP
Panel Cage: NVC

LENGTH = (CABLE LENGTH) + (17.6) .69

(102.43) 4.033

(32.35) 1.274

(8.8) .348

A

B

CABLE LENGTH ±1%

END1

END2
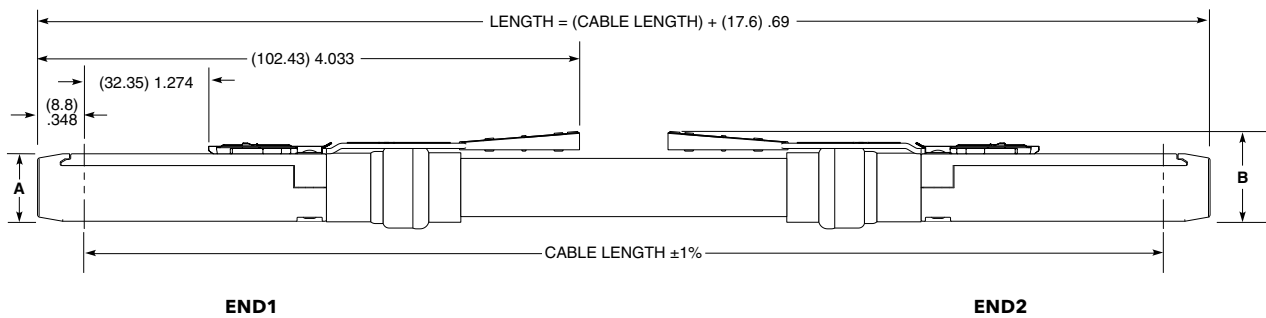
NVACE-XX-X-4-X.X-A-X-2 SHOWN

DP INDICATOR

D01 / D13

DP DP / D C B A
DP DP

01 04 07 10 13
A01 / A13

(16.00) .630
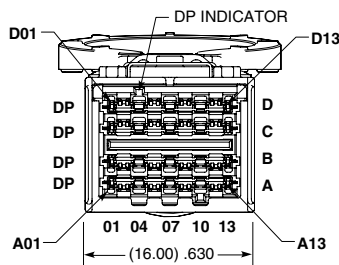
–DP SHOWN

ROW	A	B
–4	(12.75) .502	(17.00) .669
–8	(20.75) .817	(25.00) .984

D01 / D13

D C B A / SE SE SE SE

01 04 07 10 13
A01 / A13
SE INDICATOR

(16.00) .630
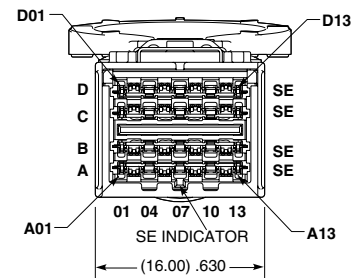
–SE SHOWN

Notes:
Cable lengths longer than 3 meters (118") are not supported with S.I. test data.

Some sizes, styles and options are non-standard, non-returnable.

View complete specifications at: **samtec.com?NVACE**