

# LinkPro™ High-Speed Copper Connectivity

LinkPro™ delivers a complete High-Speed copper portfolio for in-rack and short row-to-row links—from classic Direct-Attach Copper (DAC) to Active Copper Cable (ACC) and Active Electrical Cable (AEC)—optimized for AI back-end networks, TOR-to-NIC, and dense CLOS fabrics. Our design approach favors clean routing, predictable signal integrity, and simple scale fast operations.

## Product Families

### Direct-Attach Copper (DAC)

Low-latency, passive Twinax for the shortest reaches. A solid fit for 10/25/40/100/400/800G where the path is short and loss budgets are generous.

- Form factors: SFP+/SFP28, QSFP+/QSFP28, QSFP-DD, OSFP; straight and breakout variants
- Generations: 10G-NRZ → 112G-PAM4 per lane (aggregate to 800G)
- Benefits: lowest power and latency; simple, cost-effective cabling for very short runs

### Active Copper Cable (ACC)

Twinax with an embedded redriver/retimer to extend reach versus passive DAC and allow finer gauges for better airflow in dense racks.

- Use when distance, routing complexity, or host margins exceed passive DAC capability
- Common at 56G/112G PAM4 per lane and up to 400/800G aggregates
- Benefits: improved reach, cleaner cable routing, better thermals vs thick passive bundles

### Active Electrical Cable (AEC)

Retimer-based Twinax delivering deterministic, low-BER copper links at high speeds—often the sweet spot between DAC and optics for in-rack or short row-to-row runs.

- Integrated retimer; some platforms add gearbox/PCS/FEC for plug-and-play performance
- Speeds today: 100/200/400/800G in QSFP112/QSFP-DD/OSFP; roadmap to 1.6T (OSFP-XD)
- Benefits: longest practical copper reach with optical-like stability and simple ops

## Where Copper Fits Best

- AI/GPU back-end and CLOS fabrics: AEC enables predictable high-speed copper across dense in-rack topologies
- TOR ↔ NIC and short rack-to-rack: Use DAC for the shortest, most power-efficient paths; step up to ACC/AEC as distance and loss increase

## Form Factors & Speeds

- Form factors: SFP+/SFP28, QSFP+/QSFP28, QSFP112, QSFP-DD(800), OSFP; OSFP-XD on roadmap
- Data rates: 10/25/40/100G → 400/800G today; next-gen 1.6T development in progress

## Suggested Reach Guidance (Overview)

- DAC: best for very short, low-loss paths at each speed grade
- ACC: adds a re-driver/retimer for mid-reach links and cleaner cable routing
- AEC: retimered copper for the longest practical in-rack / short row-to-row runs at 56G/112G PAM4 per lane
- See the separate Reach Matrix document for color-coded recommendations by data rate and form factor

## Structured Copper Cabling

Beyond high-speed interconnects, LinkPro supplies end-to-end structured copper designed for clean installs and fast MACs (moves/adds/changes).

- Bulk copper cable and copper patch cords
- Modular patch panels (0.5U/1U/2U) and cable managers
- RJ45 keystone jacks and faceplates
- Pre-terminated copper trunks/harnesses and labeling kits

## High-Speed Copper Connectivity Product List

No.	Type 400/800G DAC	LinkPro PN
1	QSFP-DD 800G to 8X SFP112 100G DAC 1m	LPWWDT18OQ-3010C
2	QSFP-DD 800G to 4X QSFP112 200G DAC 1m	LPWSDT14PQ-3010C
3	QSFP-DD 800G to 4X OSFP-RHS 200G DAC 1m	LPWWDT14RR-3010C
4	QSFP-DD 800G to 2X QSFP112 400G DAC 1m	LPWWDT12IS-3010C
5	QSFP-DD 800G to 2X OSFP-RHS 400G DAC 1m	LPWWDT12RS-3010C
6	QSFP-DD 800G DAC 1m	LPWWDT11-3010C
7	QSFP-DD 400G to OSFP 400G DAC 1m	LPWSDT11XS-3010C
8	QSFP-DD 400G to 8X SFP56 50G DAC 1m	LPWSDT18ZP-3010C
9	QSFP-DD 400G to 4X DSFP56 100G DAC 1m	LPWSDT14PQ-3010C
10	QSFP-DD 400G to 2X QSFP56 200G DAC 1m	LPWSDT12CR-3010C
11	QSFP-DD 400G DAC 1m	LPWSDT11-3010C
12	QSFP112 400G to 4X SFP112 100G DAC 1m	LPISDT14OQ-3010C
13	QSFP112 400G to 2X QSFP112 200G DAC 1m	LPISDT12IR-3010C
14	QSFP112 400G DAC 1m	LPISDT11-3010C
15	OSFP-RHS 800G to 4X QSFP112 200G DAC 1m	LPRWDT14IR-3010C
16	OSFP-RHS 800G to 4X OSFP-RHS 200G DAC 1m	LPRWDT14RR-3010C
17	OSFP-RHS 800G to 2X QSFP112 400G DAC 1m	LPRWDT12IS-3010C
18	OSFP-RHS 800G to 2X OSFP-RHS 400G DAC 1m	LPRWDT12RS-3010C
19	OSFP-RHS 800G to 1X QSFP112 400G DAC 1m	LPRWDT11IS-3010C
20	OSFP-RHS 800G DAC 1m	LPRWDT11-3010C
21	OSFP-RHS 400G DAC 1m	LPRSDT11-3010C
22	OSFP 800G to 4X QSFP112 200G DAC 1m	LPXWDT14IR-3010C
23	OSFP 800G to 4X OSFP-RHS 200G DAC 1m	LPXWDT14RR-3010C
24	OSFP 800G to 2X QSFP112 400G DAC 1m	LPXWDT12IS-3010C
25	OSFP 800G to 2X OSFP-RHS 400G DAC 1m	LPXWDT12RS-3010C
26	OSFP 800G DAC 1m	LPXWDT11-3010C
27	OSFP 400G to QSFP-DD 400G DAC 1m	LPXSDT11WS-3010C
28	OSFP 400G to 8X SFP56 50G DAC 1m	LPXSDT18ZP-3010C
29	OSFP 400G to 4X DSFP56 100G DAC 1m	LPXSDT14PQ-3010C
30	OSFP 400G to 2X QSFP56 200G DAC 1m	LPXSDT12CR-3010C
31	OSFP 400G DAC 1m	LPXSDT11-3010C
No.	Type 400/800G ACC	LinkPro PN
1	QSFP-DD 800G to 8X SFP112 100G ACC	LPWWGG18OQ-3030C
2	QSFP-DD 800G to 4X QSFP112 200G ACC	LPWWGG14-3030C
3	QSFP-DD 800G to 4X OSFP-RHS 200G ACC	LPWWGG14RR-3030C

4	QSFP-DD 800G to 2X QSFP112 400G ACC	LPWWGG12IS-2830C
5	QSFP-DD 800G to 2X OSFP-RHS 400G ACC	LPWWGG12RS-3030C
6	QSFP-DD 800G ACC 3m	LPWWGG11-2830C
7	QSFP-DD 400G to OSFP 400G ACC	LPWSGG11XS-3030C
8	QSFP-DD 400G to 8X SFP56 50G ACC	LPWSGG18ZP-3030C
9	QSFP-DD 400G to 4X DSFP56 100G ACC	LPWSGG14PQ-3030C
10	QSFP-DD 400G to 2X QSFP56 200G ACC	LPWSGG12CR-3030C
11	QSFP-DD 400G ACC 3m	LPWSGG11-3030C
12	QSFP112 400G to 4X SFP112 100G ACC	LPISGG14OQ-3030C
13	QSFP112 400G to 2X QSFP112 200G ACC	LPISGG12IR-3030C
14	QSFP112 400G ACC 3m	LPISGG11-2630C
15	OSFP-RHS 800G to 4X QSFP112 200G ACC	LPRWGG14IR-3030C
16	OSFP-RHS 800G to 4X OSFP-RHS 200G ACC	LPRWGG14RR-3030C
17	OSFP-RHS 800G to 2X QSFP112 400G ACC	LPRWGG12IS-3030C
18	OSFP-RHS 800G to 2X OSFP-RHS 400G ACC	LPRWGG12RS-3030C
19	OSFP-RHS 800G to 1X QSFP112 400G ACC	LPRWGG11IS-3030C
20	OSFP-RHS 800G ACC	LPRWGG11-2830C
21	OSFP-RHS 400G ACC	LPRSGG11-3030C
22	OSFP 800G to 4X QSFP112 200G ACC	LPXWGG14IR-3030C
23	OSFP 800G to 4X OSFP-RHS 200G ACC	LPXWGG14RS-2830C
24	OSFP 800G to 2X QSFP112 400G ACC	LPXWGG12IS-3030C
25	OSFP 800G to 2X OSFP-RHS 400G ACC	LPXWGG12RS-2830C
26	OSFP 800G ACC 4m	LPXWGG11-2640C
27	OSFP 400G to QSFP-DD 400G ACC	LPXSGG11WS-3030C
28	OSFP 400G to 8X SFP56 50G ACC	LPXSGG18ZP-3030C
29	OSFP 400G to 4X DSFP56 100G ACC	LPXSGG14PQ-3030C
30	OSFP 400G to 2X QSFP56 200G ACC	LPXSGG12CR-3030C
31	OSFP 400G ACC 3m	LPXSGG11-3030C
<b>No.</b>	<b>Type 400/800G AEC</b>	<b>LinkPro PN</b>
1	QSFP-DD to QSFP-DD 800G AEC 7m	LPWWE11-2870C
2	QSFP112 to QSFP112 400G AEC 5m	LPISEE11-3250C
3	OSFP-RHS to OSFP-RHS 800G AEC 7m	LPRWEE11-2870C
4	OSFP 800 to OSFP800 800G AEC 7m	LPXWEE11-2870C
<b>No.</b>	<b>Type 100/200G DAC / ACC</b>	<b>LinkPro PN</b>
1	SFP-DD 100G DAC 1m	LPYZDT11-3010C
2	SFP56 50G DAC 1m	LPZPDT11-3010C
3	SFP56 50G ACC 3m	LPZPGG11-3010C
4	SFP112 100G DAC 1m	LPODT11-3010C

5	QSFP56 200G to 4XSFP56 50G DAC 1m	LPCRDT14ZQ-3010C
6	QSFP56 200G to 4XSFP56 50G ACC 3m	LPCRGG14ZQ-3030C
7	QSFP56 200G to 2XQSFP56 100G DAC 1m	LPCRDT12CQ-3010C
8	QSFP56 200G to 2XQSFP56 100G ACC 3m	LPCRGG12CQ-3030C
9	QSFP56 200G to 2XQSFP56 100G ACC (PDD) 3m	LPCRGG12CQ-3030C
10	QSFP56 200G to 2XDSFP56 100G DAC 1m	LPCRDT12PQ-3010C
11	QSFP56 200G to 2XDSFP56 100G ACC 3m	LPCRGG12PQ-3030C
12	QSFP56 200G DAC 1m	LPCRDT11-3010C
13	QSFP56 200G ACC 3m	LPCRGG11-3030C
14	QSFP28 100G DAC 1m	LPBQDT11-3010C
15	DSFP56 100G DAC 1m	LPPQDT11-3010C
16	DSFP56 100G ACC 3m	LPPQGG11-3030C

Note: Any product drawing needed, please contact us through Email: [sales@linkprocabling.com](mailto:sales@linkprocabling.com)

## Why LinkPro

- Vendor-agnostic sourcing aligned with Tier-1 ecosystems
- Lifecycle simplicity: pre-engineered BOMs, clear labeling, and routing that scales from DAC to ACC/AEC as speeds and lengths increase

## Notes

SFP, QSFP, QSFP-DD, OSFP, OSFP-RHS, DSFP and related names refer to MSA specifications.