# Chelsio Unified Wire Adapter Product Selection Guide

## Single Adapter with concurrent Multi-Protocol Operation

### T6 ASIC based Ethernet Adapters

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</thead>
<tbody>
<tr>
<td>Ports</td>
<td>2x40/50/100G</td>
<td>2x10/25G</td>
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<tr>
<td>Connector Type</td>
<td>QSFP28</td>
<td>SFP28</td>
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<tr>
<td>Host Interface</td>
<td>PCIe Gen3 x16</td>
<td>PCIe Gen3 x8</td>
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<tr>
<td>Form Factor</td>
<td>Half Size</td>
<td>Low Profile</td>
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<tr>
<td>Concurr. Conn.</td>
<td>32k</td>
<td>16W</td>
<td>256</td>
<td>32k</td>
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<tr>
<td>Power (Typical)</td>
<td>22W</td>
<td>19W</td>
<td>15W</td>
<td>13W</td>
<td></td>
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<tr>
<td>Airflow</td>
<td></td>
<td></td>
<td>200 LFM (Linear Feet Per minute)</td>
<td></td>
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<tr>
<td>Adapter Type</td>
<td>Unified Wire</td>
<td>Server Offload</td>
<td>CNA</td>
<td>Unified Wire</td>
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### T5 ASIC based Ethernet Adapters

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<tbody>
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<td>2x100M/1/10G</td>
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<td>QSFP+ Cage</td>
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<td>Host Interface</td>
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<tr>
<td>Power (Typical)</td>
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<td>20W</td>
<td>12W</td>
<td>11W</td>
<td>9W</td>
<td>17W</td>
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<tr>
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### Adapter Types and Supported Functions:

- **Server Offload**
  - L2 NIC

- **CNA**
  - Server Offload Functions, iSCSI Initiator HW Offload, iSER Initiator HW Offload, NVMe-oF Initiator HW Offload, FCoE Initiator, Unified Boot, S2D iWARP HW Offload, RDMA over iWARP

- **Unified Wire (UWire)**
  - Server Offload & CNA functions, FCoE HW Offload, Storage Target Offload, Media Streaming Offload, TCP & UDP Offloads, Traffic Management, Filtering, Encryption Offload

### Features

- Windows Server 2012-R2 / 2016 / 2019
- Windows Storage Spaces Direct (S2D)
- Windows Azure Stack Private Cloud
- Windows Network Direct
- Windows SMB Direct
- Windows Client RDMA
- Windows Storage Replica (SR)
- Windows dVMMQ
- Low Latency L2 NIC
- TCP/IP Offload Engine (TOE)
- iWARP RDMA Offload
- TLS/SSL, DTLS, IPsec, SMB 3.X crypto
- iSCSI Initiator and Target
- iSER Initiator and Target
- FCoE Initiator and Target
- NVMe-oF Initiator and Target
- NVMe/TCP Initiator and Target
- NVMe/TOE Initiator and Target
- NVMe JBOF (Just a Bunch of Flash)
- GPU Direct RDMA
- Wire Direct Low Latency Suite
- SR-IOV / Virtualization
- DPDK / PacketDirect / Netmap
- OVS / OpenFlow Offload
- NVGRE / VxLAN / Geneve
- Media Stream Engine
- Traffic Management / DCB
- Packet Classification
- Sniffer / Tracer
- Multi / Single adapter Failover

1 Supported only on T6 family of adapters
2 Not supported by SO (Server Offload) adapters

**LP**: Low Profile  
**SO**: Server Offload
Chelsio ASIC, Software and Support Guide

Unified Wire & Server Offload Controller ASICs

T6 is a highly integrated, hyper-virtualized 1/10/25/40/50/100GbE controller ASIC with full offload support of a complete Unified Wire solution comprising L2 NIC, TOE, iWARP RDMA, iSCSI, FCoE, NVGRE, VxLAN, Filtering, Traffic Analytics, Management, OVS Offload, DCB, NVMe-oF, NVMe/TCP, NVMe/TOE and TLS/SSL, DTLS, IPsec, SMB 3.x crypto Offload.

Ordering Information:

T6ASIC2100: T6 Unified Wire Engine, 2x1/10/25/40/50/100G ports, full featured.

T5ASIC40G: T5 Unified Wire Engine, 2x40G or 4x10G ports, full featured.

Chelsio Terminator Core IP

Chelsio’s Terminator Core IP is a configurable, high performance Ethernet packet processing engine with a full suite of software, suitable for a wide range of SoC network connectivity solutions. Contact sales@chelsio.com for more information.

Accessories

T9CACABLE3M (3M 10G Passive)
T9CABLE28-3M (3M 25G Passive)
T9CABLE28-1M (1M 100G QSFP28 Passive)
T9CABLE28-2M (2M 100G QSFP28 Passive)

Optical Cables

QSRCABLE10M (10M Short Reach for 40G and 100G)

Optical Transceivers

SM10G-SR (10G Short Reach SFP+)
SM10G-LR (10G Long Reach SFP+)
SM25G-SR (25G Short Reach SFP28)
SM25G-LR (25G Long Reach SFP28)
SM40G-SR (40G Short Reach QSFP+)
SM40G-LR (40G Long Reach QSFP+)
SM100G-SR (100G Short Reach QSFP28)
SM100G-LR (100G Long Reach QSFP28)

Support

The standard warranty period for Chelsio hardware products is three years from date of purchase. To contact support, call Chelsio at 408-962-3600, submit a support request via www.chelsio.com or email support at support@chelsio.com. Drivers for Chelsio adapters are available at service.chelsio.com

Support Plan:

SUPPORT-GOLD: 40 hours extended technical support: 24-hr response/replacement.
SUPPORT-SILVER: 4 hours extended technical support: 24-hr response.

Supported Platforms, Operating Systems and Hypervisors

- OpenPOWER
- SUSE
- Windows Server
- Microsoft Hyper-V
- Red Hat
- FreeBSD
- ARM
- MacOS
- VMware ESXi
- x86
- POWER8
- CentOS

Chelsio Communications  www.chelsio.com  sales@chelsio.com  +1-408-962-3600