Centec E330 Product Introduction

Centec Networks (SuZhou) Co. Ltd
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Agenda

- Centec Product Introduction: Silicon & E330
- E330 Product Details
- E330 Application Scenario
# Centec Silicon Roadmap

**FULL Lineup from Access to Core**

## 25G/50G/100G/200G/400G Core
- **2018**: CTC9032 Taurus 6.4T 14nm

## 10G/25G/100G Aggregation
- **Q2-2018**: CTC8196 GoldenGate2 3.2T 14nm
- **CTC8096 GoldenGate 1.2T 32nm**

## Value 10G Multi-Giga Aggregation
- **Q2-2017**: CTC7148 DUET2 640Gbps 32nm
- **CTC7048 DUET 640Gbps 32nm**

## 1G/2.5G Multi-Giga Access
- **Q4-2017**: CTC5236 TsingMa 180G 28nm
- **CTC5160 GreatBelt 120Gbps 45nm**
- **CTC5120 Rama 40Gbps 45nm**

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Humber Series Overview

- High feature, high performance IP/Ethernet switching silicon with L2~L4 processing capability.

- Key Features
  - 176 Gbps packet processing capability
  - Up to 512K MAC
  - Ethernet bridging, IPv4, IPv6 routing, MPLS/MPLS-TP switching, MPLS-TP OAM, SyncE, 1588, L2/L3 VPNs, NAT, ACL/QoS/H-QoS processing, DCB features (PFC, ETC, QCN, etc), CAPWAP, security features, etc.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTC6048</td>
<td>Access/Aggregation platform for Carrier Ethernet and Packet Transport</td>
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</table>
E330 Series is built on Centec's CTC6048 silicon, integrating L2/L3 advanced software suit to provide a complete system solution.
## Centec New Switch Platform Solution: E330

<table>
<thead>
<tr>
<th>Models</th>
<th>Port Configuration</th>
<th>Description</th>
</tr>
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</table>
| **E330-52TX** | - 48 x10/100/1000M Base-T port  
- 4 x 10G SFP+ Port | - Pluggable AC/DC Power Module  
- Pluggable and Speed Adjustable Fans (Front to Rear airflow)  
- Support RJ45 Console and Eth Management port |
| **E330-24T** | - 48 x10/100/1000M Base-T port  
- Modular Uplink |                                                                                          |
| **E330-52SX** | - 48 x10/100/1000M Base-X SFP port  
- 4 x 10G SFP+ Port |                                                                                          |
| **NM-4SFP+** | - 4x1G/10G SFP+ Ethernet Port (1G SFP compatible for E330-24T, 1G SFP is Combo with the last 4 RJ45 ports) |                                                                                          |
E330 Highlight Summary

- Standard 1RU pizza-box solution

- 176 Gbps switching capacity, Wire-speed for all 48x1GE + 4x10GE

- Cut through for Low latency

- Up to 32K MAC / 16K IP

- Low system power - less than 85W

- Support EFM/CFM/G.8031/G.8032 Metro L2 services
Centec System Solution Roadmap

3Q/2012

CTC6048
- 48x1G + 4x10G
- 32K MAC / 16K IP
- MPLS / Metro
- 16Kx80 TCAM
- External TCAM Support

E330
- 48x1G + 4x10G
- Product quality switch software

V330
- 48x1G + 4x10G
- OVS 1.5 / OF 1.0
- 2.5K 12-tuple flow
- NuGRE / MPLS tunnel
- Multi-destination
- More editing actions
- Complete Open Source

1H/2013

1G + 10G

CTC5160
- 48x1G + 8x10G
- 128K MAC / 64K IP
- MPLS / Metro
- < $100 in cost

1H/2015

GoldenGate
- 96 x 10G / 24 x 40G
- 48 x 10G + 4 x 100G
- 256K MAC / 128K IP
- MPLS / Metro
- SDN Innovations

V580
- 48x10G + 2x40G + 4x100G
- 48x10G + 4x100G
- 24x40G
- 48x10G
- 32x10G
- Hybrid: OVS L2/OpenFlow
- Complete Open Source

E580
- 48x10G + 2x40G + 4x100G
- 48x10G + 4x100G
- 24x40G
- 48x10G
- 32x10G
- Open source switch SW
- Based on Quagga
- Product quality

2H/2013

E350
- 48x1G + 4x10G
- 8x1G + 12x10G
- 24x10G
- Product quality switch software

V350
- 48x1G + 4x10G
- 8x1G + 12x10G
- Large hash based flow

10G

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E330-52TX Hardware Platform

- Air-Holes
- 48x1GE Copper
- 4 SFP+ Uplink ports
- Pluggable and speed-tunable fans
- AC/DC replaceable dual power supply
- RJ45 Serial Port
- Ethernet Port for management
- USB
E330-24T Hardware Platform

- Air-Holes
- 24x1GE Copper
- AC/DC replaceable dual power supply
- Pluggable and speed-tunable fans
- 4 SFP+ Uplink ports
- RJ45 Serial Port
- Ethernet Port for management
- USB
E330-52SX Hardware Platform

- Air-Holes
- 48x1GE SFP
- 4 SFP+ Uplink ports
- AC/DC replaceable dual power supply
- Pluggable and speed-tunable fans
- RJ45 Serial Port
- Ethernet Port for management
- USB
E330 Software Summary

- **Built with IP Infusion architecture**

- **Include 2 software options** (License management)
  - **IP Base** - Complete layer 2 and access layer 3 switching features
  - **IP Service** - Complete layer 3 and metro layer 2 switching features
# Centec Switch Software – 2 Options

<table>
<thead>
<tr>
<th>IP Base</th>
<th>IP Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2 Switching/VLAN/Vlan Classification</td>
<td><strong>IP Base +</strong></td>
</tr>
<tr>
<td>Static Link Aggregation/LACP</td>
<td>OSPF/Route Map/ BPR/ VRF/BFD for Static Route&amp;OSPF</td>
</tr>
<tr>
<td>STP&amp;RSTP&amp;MSTP/Smart Link/MLAG</td>
<td>IGMP v1&amp;v2&amp;v3/PIM-SM&amp;SSM</td>
</tr>
<tr>
<td>IGMP Snooping v1&amp;v2&amp;v3</td>
<td></td>
</tr>
<tr>
<td>ACL, QoS</td>
<td></td>
</tr>
<tr>
<td>Storm Control/Port Security/DHCP Snooping/IP Source Guard/ARP Inspection/ CPU Storm Protection/ 802.1x/ Radius</td>
<td></td>
</tr>
<tr>
<td>Telnet/TFTP/NTP/SSH/DNS/SNMPv1&amp;v2&amp;v3/RMON/Port&amp;Vlan Mirror/sFlow</td>
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</tbody>
</table>

**Notes:** Features remarked with “*” are roadmap
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Metro L2 Ring Network Application

- **Related Features:** VLAN/QinQ, ERPS, G.8032, EFM/CFM, QoS etc.
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