

Application Overview – Ethernet over T1 (Router)

Application: Ethernet LAN Extension over T1

(Charles 360-80 Intelligent Channel Bank with RAD TinyRouter)

Customer Solutions: Enterprise, Campus, ITCOs, CLECs.

Description: This solution allows customers to cost effectively provide Ethernet connectivity to PCs and other devices served by a T1 network.

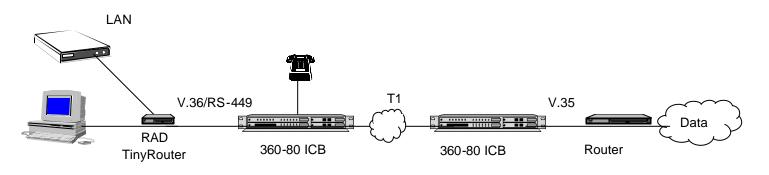


Figure 1: System Diagram

The Charles 360-80 Intelligent Channel Bank (ICB) provides a cost effective platform for managing T1 voice and data services. With its advanced design and multi-service compatibility, the 360-80 ICB maximizes T1 services while minimizing installation, maintenance and support costs.



Fig. 2: 360-80 ICB

The RAD TinyRouter is a high performance, miniature IP router. Its small size and low cost make it ideal for cost-sensitive routing applications. It requires only one software parameter to be configured making it a plug and play device.



Benefits:

- Allows customers to share T1 bandwidth for both voice and data applications
- Cost effective solution
- Simple to install and operate
- Small footprint
- 360-80 ICB is temperature hardened for remote and outdoor applications

Alternate Solution:

For customers seeking to connect to their Ethernet network via a bridge, Charles Industries has also tested the 360-80 with the RAD TinyBridge. For further information refer to the "360-80 ICB with RAD TinyBridge" application note.

Further Information:

Further information on Charles Industries products may be found at: <u>http://www.charlesindustries.com</u>