

## **Application Overview – Ethernet over T1 (Bridge)**

**Application:** Ethernet LAN Extension over T1

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

**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.

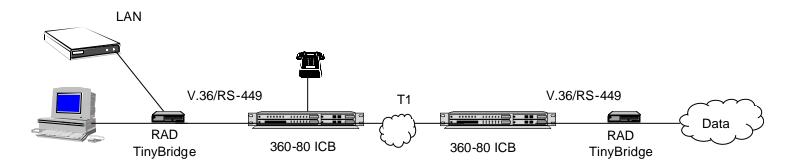


Figure 1: System Diagram

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 TinyBridge is a high performance, remote, self-learning Ethernet bridge. Its small size and low cost make it ideal for cost-sensitive bridging applications.



Fig. 2: RAD TinyBridge

## 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 router, Charles Industries has also tested the 360-80 with the RAD TinyRouter. For further information refer to the "360-80 ICB with RAD TinyRouter" application note.

## **Further Information:**

Further information on Charles Industries products may be found at: <a href="http://www.charlesindustries.com">http://www.charlesindustries.com</a>