Product Comparison

Matrix SETU VTEP and Digium TE122 PCI card

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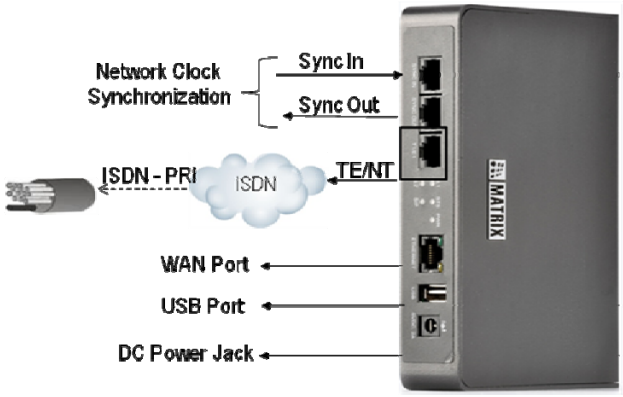
Matrix ComSec

INTRODUCTION

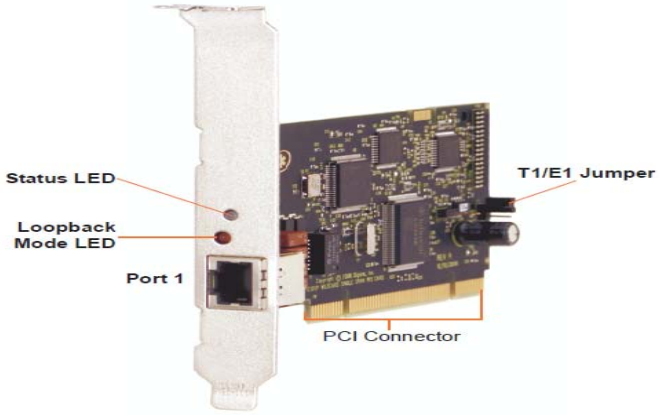
Matrix SETU VTEP



SETU VTEP

Matrix SETU VTEP is an embedded VoIP-T1/E1/PRI gateway. It is a compact and dedicated VoIP-ISDN PRI Gateway offering 30 VoIP Channels and 1 ISDN PRI Port. It supports up to 30 simultaneous VoIP to ISDN PRI calls.

Digium TE122 PCI Card



Digium TE122 is a T1/E1 capable PCI card for voice and data applications. It can operate with asterisk platform. It is a single span ISDN PRI PCI card to connect an asterisk based machine with digital network.

SETU VTEP- The Competitive Edge

Operating Platform and Usage Capacity

- Digium TE122 is a PCI based VoIP- ISDN PRI card for asterisk Platform. Digium supports only Linux Operating system with some specific number of distributions.
- As per the slots available in Motherboard, maximum number of such PCI cards that can be inserted is restricted to either 2 or 4 cards.
- Being an embedded product, SETU VTEP doesn't have any such operating limitations.

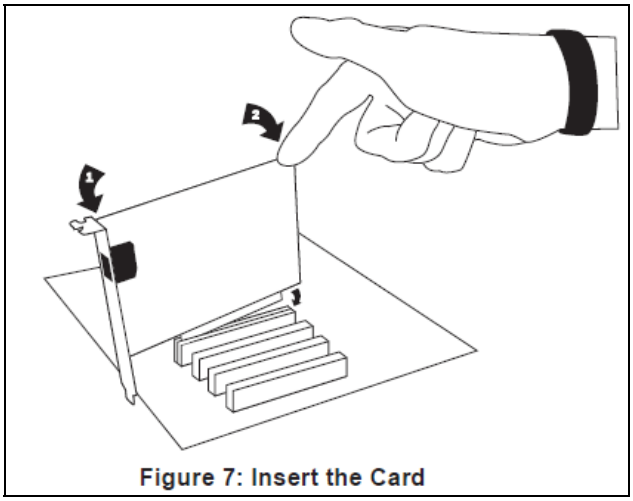


Figure 7: Insert the Card

As shown in the figure, TE122 fits into specific PCI slot of the motherboard. Hence, need different server for installing more than 2/4 cards (depending upon the type of motherboard).

Configurable Parameters

- Digium TE122 supports T1/E1/J1 mode for PRI connectivity. The selection is done with hardware jumper of the PCI card. Hence, the user needs to unplug the card to change the operating mode. Matrix SETU VTEP, on the other hand, offers software selectable T1/E1 mode to connect with ISDN PRI network.

- Matrix SETU VTEP offers programmable TE and NT mode for hassle free integration with existing communication infrastructure. Digium TE122 doesn't provide any such flexibility.

Network Clock Synchronization

- Matrix SETU VTEP provides dedicated SYNC-IN and SYNC-OUT ports for network clock synchronization. This is useful for having common clock source between SETU VTEP and connected ISDN PBX system, which in turn, provides error free communication. No such provision is provided in Digium ISDN PRI card.

Hidden Cost in Card based Product

- Apart from the hardware cost of TE122 PCI card, the user needs to install/invest in following parameters:
  - ✓ A dedicated PC or server
  - ✓ Asterisk Server as operating platform
  - ✓ Linux OS (as TE122 supports only Linux OS)
  - ✓ Additional purchasable drivers and libraries
  - ✓ Echo Cancellation Module (VPMOCT032)

- Embedded product like SETU VTEP does not have any hidden cost or maintenance charges.

Voice Quality

- Digium TE122 needs additional hardware module, VPMOCT032, for echo cancellation purpose.
- SETU VTEP provides built-in G.168 echo-cancellation with variable Tail-Length.

PRODUCT COMPARISON

Parameters	SETU VTEP	Digium TE122 VoIP-PRI Card
Configuration		
Platform	Embedded VoIP-T1/E1/PRI Gateway	Asterisk based T1/E1 capable PCI Card
VoIP Channels	32	30
PRI Port	1	1
Selectable T1/E1/J1 Mode	Programmable T1/E1 mode for hassle free integration with existing communication infrastructure	Yes, Hardware Jumper based selection
TE/NT Mode	Software Programmable TE/NT Mode	Yes
Network Clock Synchronization	Dedicated Sync-In and Sync-Out Port for network clock synchronization	No Provision
Operating Conditions		
Operating System	NA, embedded gateway product	Limited to Linux Platform only (with specified number of distributions of Linux)
Operating Voltage	5V DC @ 2A Power Adaptor	Can be operated only with 3.3V or 5.0 V PCI 2.2 compliant slot
Additional Software Requirement	No additional software is required	Require additional drivers and libraries that are not integrated with Linux kernel
Maximum Capacity of Usage	No limitation	The card fits into specific PCI slot of the motherboard. Hence, restricted to 2 or 4 cards depending on mother board of server
Voice		
Echo Cancellation	Built-in G.168 Echo-Cancellation with variable Tail-Length	Additional Echo Cancellation module is required
Voice Codecs	G.711(a/μ law),G.723.1,G.729 , GSM-FR/EFR and iLBC 20/30 ms	G.711,G.723.1,G.729a and iLBC 20/30 ms
Vocoder Preference	Arrange Channel wise codecs as per preferred order which also aids in effective bandwidth utilization	No Provision
Peer-to-Peer Calling	Peer-to-Peer Table with 500 entries facilities to dial abbreviated codes instead of IP address	No Provision
Fax over IP	Yes, using T.38 and Pass-Through	Yes

Comparisons are based on information available from respective product catalogues and manual
To the best of our knowledge. For more details please contact respective manufacturer.