

TJ1600 LTE

LTE eNodeB on the TJ1600 Platform



Highlights:

- TD-LTE Release-9 eNodeB on TJ1600-11 and TJ1600-2 platform
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- Scalable eNodeB Baseband Line cards (upto 9 on the TJ1600-11, upto 2 on TJ1600-2)
- Each Baseband card acts as a 3 sector LTE Macro Base Station Baseband Unit
- Coexists with other transport line cards on TJ- 1600C platform
- Base Station Synchronization through GPS, SyncE, PTPv2 or BITS
- Tower mounted RRH (Remote Radio Head) for each sector connecting to Baseband card over fiber with up to 20 km between RRH and Baseband card
- Operations and Management Inte-

Overview

TJ1600 platform now extends its role from the backhaul/enterprise segment to the wireless access segment by offering LTE Base Station capability. With the addition of the Line card, TJ1600 now offers a complete TD-LTE Release -9 compliant 2X2 MIMO Three sector Macro eNodeB. The baseband processing for the three sectors is handled by the Baseband card while the Remote Radio Head handles the RF up/down conversion. The RRHs are mounted on a tower while the Baseband card occupies one line card slot on the TJ 1600.

Multiple Baseband cards (up to 9) can be stacked in a single TJ1600-11 chassis to scale up LTE eNodeB deployment. Alternatively, a combination of packet transport line cards and LTE Baseband cards can co-exist and interoperate. This allows incremental up gradation of existing TJ1600 systems to become LTE capable.

For green field deployments TJ1600-2 chassis can be used to deploy up to 2 Baseband cards capable of 6-sector operation.



Key Benefits

Quick Upgradation and scalability: TJ1600 installations can seamlessly add LTE access capability with insertion of Baseband cards on free slots without disturbing existing operation.

Flexible: Each Baseband card can act as a coordinated three sector Base station or three independently deployed single sector Base stations.

Multiple Synchronization options: eNodeB can use existing synchronization mechanisms like SyncE or PTPv2/BITS . In addition, dedicated synchronization inputs and outputs (1PPS and 10MHz) are available for GPS sync. Multiple Baseband cards can be daisy chained, thus, requiring only one GPS receiver per site irrespective of the number of eNodeBs installed.

Deployment specific access scheduling:

Customizable scheduling profiles available for operator to optimize throughput, latency, coverage, etc. depending on specific deployment needs, on a per cell basis.

Backhaul optimizations: eNodeB backhaul is seamlessly integrated with Tejas transport solutions in order to maximize LTE transport performance, while remaining network ready for EPC specific optimizations. LTE eNodeB can optionally operate independent of the Tejas transport units. Two separate front panel optical / electrical GigE ports are available for dedicated backhaul connectivity.