

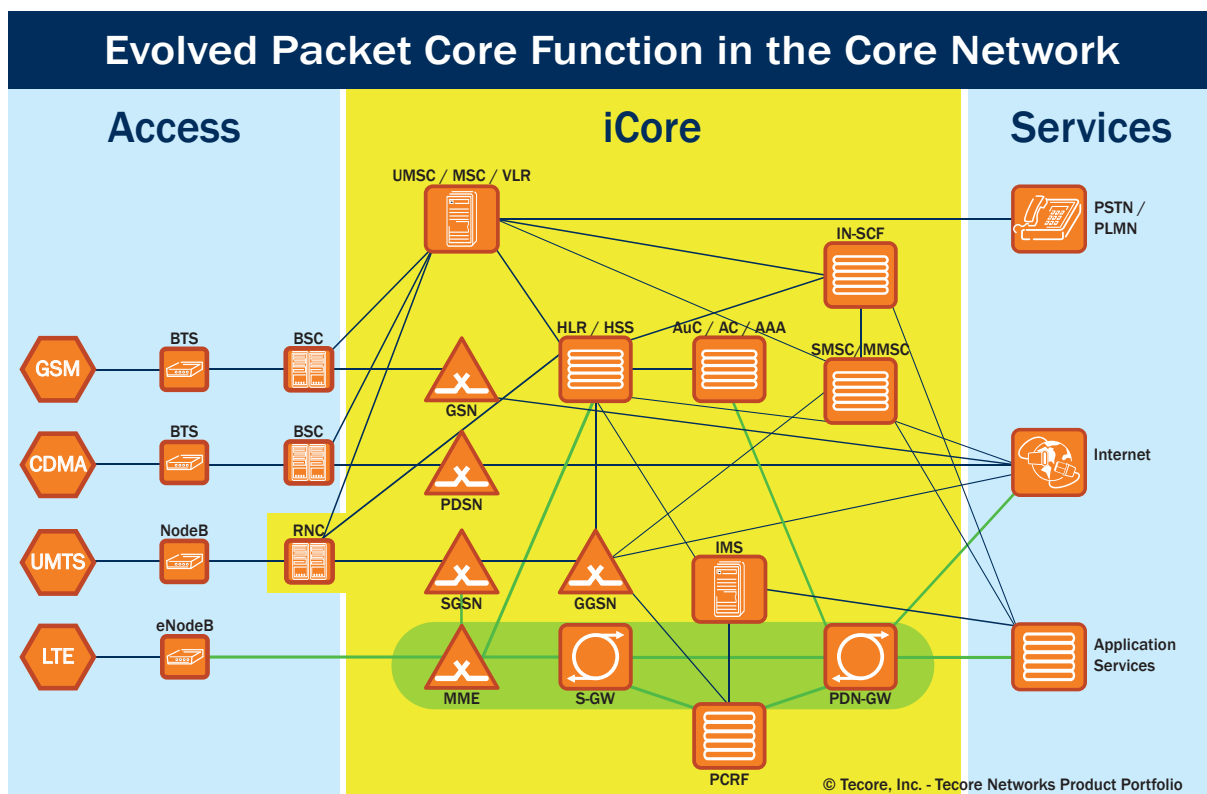
LTE Evolved Packet Core






Long Term Evolution (LTE) is the fourth generation of wireless technology, enabling faster and richer applications and support of multiple access technologies, all while streamlining the core infrastructure on IP. Consistent with its track record, Tecore is the only vendor delivering an Evolved Packet Core (EPC) focusing specifically on the needs of smaller markets such as rural and remote operators, as well as specialized and government applications. The iCore EPC provides a unique integrated architecture with compliant interface capabilities to operate as a standalone system or as an integrated component in a larger network deployment. The iCore platform architecture facilitates an upgrade path for current 2G/3G infrastructure to add LTE as a complementary technology. Based on its full compliance with 3GPP standards, the iCore EPC is interoperable with any standards-compliant eNodeBs, allowing operators maximum flexibility, efficiency and cost-effectiveness in deployments.

Features

- Compliant with 3GPP Release 8
- Scalable from 1-200 eNodeBs
- Interoperable with leading vendors' eNodeBs
- 99.999% Availability
- Built on 64-bit Linux OS



System Implementation

	Level 1 	Level 2 	Level 3 
Target markets	Remote, transportable and laboratory systems	Entrepreneurial operators and larger remote operators and larger remote installations	Large capacity deployments
Hardware	MicroTCA	ATCA	High Availability ATCA
Operation	Standalone or Interconnected	Standalone or Interconnected	Standalone or Interconnected
eNodeB Capacity	1-10 Total eNodeBs	1-100 Total eNodeBs	1-200 Total eNodeBs
Packet Connectivity	1 Gb Interface	10 Gb Interface	10 Gb Interface per ATCA blade
MME Device Capacity	Scalable to 5,000	Scalable to 50,000	Scalable to 100,000 per ATCA blade

Software Specifications

FUNCTIONS

- Mobility Management Entity (MME)
 - Control plane
 - Terminates Non-Access Stratum (NAS) signaling messages
 - Mobility and session management functions of E-UTRAN UE
- Serving Gateway (S-GW)
 - User plane
 - Direct interface point for eNodeB
 - Local mobility anchor point for inter-eNodeB handover and inter-3GPP mobility
- Packet Data Network Gateway (P-GW)
 - User plane
 - Dynamic IP address allocation for the UE
 - Anchor point for mobility across non-3GPP (trusted and non-trusted) networks

INTERFACES

- S1-MME (eNodeB and MME)
- S1-U (eNodeB and S-GW)
- S2 (trusted non-3GPP access and P-GW)
- S3 (inter-3GPP access network mobility)
- S5 (S-GW and P-GW)
- S6a (MME and HSS)
- S8 (S-GW in the VPLMN and P-GW in the HPLMN)
- S10 (between MMEs for MME relocation, and MME-MME information transfer)
- S11 (MME and S-GW)
- SGi (P-GW and packet data network)

SYSTEM MANAGEMENT

- Fault Management
- Configuration Management
- Accounting Management
- Performance Management
- Security Management

OPERATING SYSTEM

- 64-bit Linux-based processing / Centos