ZTE SPC SWITCH

ZXJ10

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CONTENT

1. General

ZXJ10 is the most successful digital switching system worldwide. By the end of 2003, over 60 million ZXJ10-switched ports across the globe are running steadily, absolutely compatible with other main-stream vendors's switching system. With its extensive functionalities, ZXJ10 helps you, as a carrier, build the network you want, in the market you want. And of course, ZXJ10 makes you ready for the Next Generation Network.

With new technology emerging everyday, the telecom competition becomes stiff and every telecom carrier wishes to keep its leading position in this field, which poses a great challenge to both carriers and suppliers. How to propose a cost-effective solution for the carriers, how to develop a long-term partnership with the carriers and how to grow up with carriers are the concern of ZTE.

Since ZXJ10 came into being in 1989, it has made great achievements for its flexibly networking ability, multiple access methods, high reliability and abundant services, It has worked as international/national gateway offices, local/toll tandem offices, end offices and private network switch all over the world. ZXJ10 adjusts itself continually to fulfill the changing requirement from carriers. New features, facilities, tailored services are developed in tireless way and in amazing speed, which make ZXJ10 brand-new. Intelligent network service, wireless and broad-bind access are integrated in ZXJ10 to adapt market's requirement. ZXJ10 is playing a more and more important role in national and international telecom network building.

2.ZXJ10 Product Portfolios

The development of ZXJ10 is based on modular design and fully distribution architecture, which

makes it very easy to expand capacity and provide new features. Because its high flexibility and reliability, ZXJ10 is widely applied in the construction of public telephony network and private network..

ZXJ10 products are organized to three categories in side of the networking, as showed in the Fig 1:

I. **Central Module (CM)**: As a host when networking, peripheral switching module, remote module and remote line module can be attached to CM. The available switching network capacity of CM are from 8K*8K to 256K*256K.

II. **Switching Module(SM):** Attached to CM, also remote line modules can be attached to it. The switching network capacity of SM available is from 2K*2K to 16K*16K.

III. **Remote Line Module (RLM)**: Attached to SM/CM, with self-switching ability. The subscriber capacity of remote line module is from 96 subscriber lines to 960 subscriber lines.

Networking topology of CM、SM、RLM is as the fig 1. The connection between CM/SM/RLM can be optical interface which is built in.

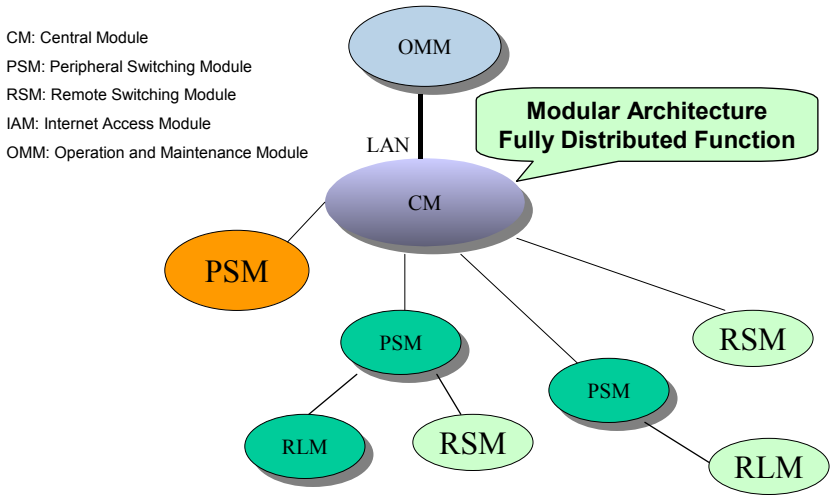
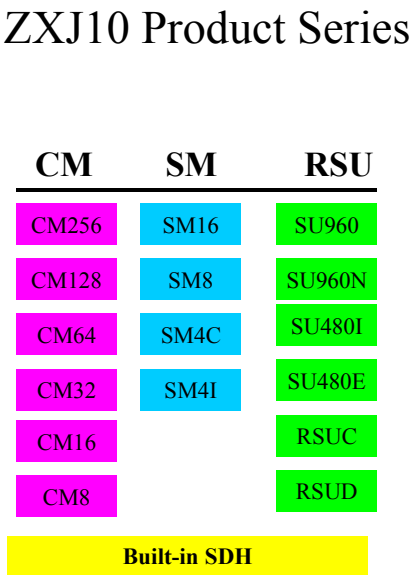


Fig. 1 the Architecture of ZXJ10

Fig.2 showsZXJ10 products category and capacity. Note that the capacity number after CM indicates the maximum capacity of whole switching system with a lot of SMs/RLMs.

SU480 series RLM integrates some accessorial equipment such as rectifier, battery, MDF and DDF. SU480E is outdoor type and SU480I is indoor type.



Model	Capacity Subscribers/ Trunks	Remark
CM256	1,000K/250K	total capacity of multi-modules
CM128	800K/180K	
CM64	600K/90K	
CM32	230K/43K	
CM16	110K/20K	
CM8	70K/10K	
SM8	15K/6K	
SM16	15K/14K	
SM4C	5K/600	
SM4I	720/720	
SU960	960	
SU960N	960	
SU480I	480	Indoor type.MDF, DDF, Rectifier integrated inside
SU480E	480	Outdoor type, MDF, DDF, Rectifier integrated inside
RSUC	480	
RSUD	96/192	

Fig. 2 ZXJ10 products category

Fig.3 shows the rack of different module or RLM.

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Fig.3 the rack of ZXJ10

3. ZXJ10 Technical Indices

Tab.1 ZXJ10 Technical Indices

Items	Specification & Parameters
System Architecture	● Fully-distributed control between modules, hierarchical & centralized control within modules; ● Integrate switching and transmission, narrow-band and broadband services together, with an open hardware platform structure.
System Capacity	● 1,000K subscriber lines or 250K trunks for maximum capacity; ● BHCA: 500K/sigle module; 20,000K for the whole system.
DSN Capacity	● 4K×4K, 8K×8K, 16K×16K, 64K×64K, 128K×128K, 256K×256K.
Remote Access Module	● SM16, SM8, SM4C, SU960, SU960N, SU480I, SU480E, RSUC, RSUD.
Networking Solutions	● 4-level networking; ● Built-in SDH is used to construct the tree, star, chain, ring or hybrid network topology; ● By software configuration, the signaling board ASIG can be configured as TONE, DTMF, MFC, Conference Call or CID boards; ● All analog trunk cards such as SFT card, EM card, Loop trunk card and ABT trunk card can be inserted in mixed configuration.
Integration	● 24/32 subscriber lines per analog subscriber board; ● 16 E1 per digital trunk board; ● 1 STM-1 optical/electrical interface provided by STM-1 optical trunk board; ● 3 racks for 10K subscribers, 1 rack for 10K trunks; ● 120/480 circuits per ASIG board.
Signaling	● 64 SS7 links provided by a single module, 16 links processed by a single board; ● Processing capacity of one link: 0.95 Erl; ● STP, TCAP provided; ● GT translation capability: 1500 * N GTT/module (N indicates the number of modules); ● 24 V5.2 signaling interfaces, 96 signaling channels and 16 links processed by a single card.
Billing & Accounting	● Billing mode: Centralized billing system; ● Data security: 2-level caching + 5-level backup, communication interruption protected, double hard disks, data storage in multiple file formats, transaction processing mechanism; ● Operator priorities: Operator’s priorities and rights can be set ● Report tables: 20 report table templates and customization tools.
Software	● Advanced clock management and process scheduling algorithm to increase system's operating efficiency; ● Advanced fault detection and rubbish handling procedures to bring high reliability and stability to software, as well as self-healing function; ● Perfect software upgrade function. The circuit board can detect and load new software version automatically. Manual software upgrade through the OAM terminal is also available and convenient; ● Software integrity check on startup; self-recovery is performed in