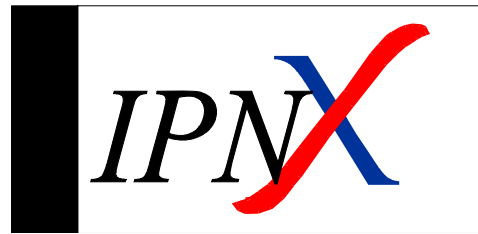


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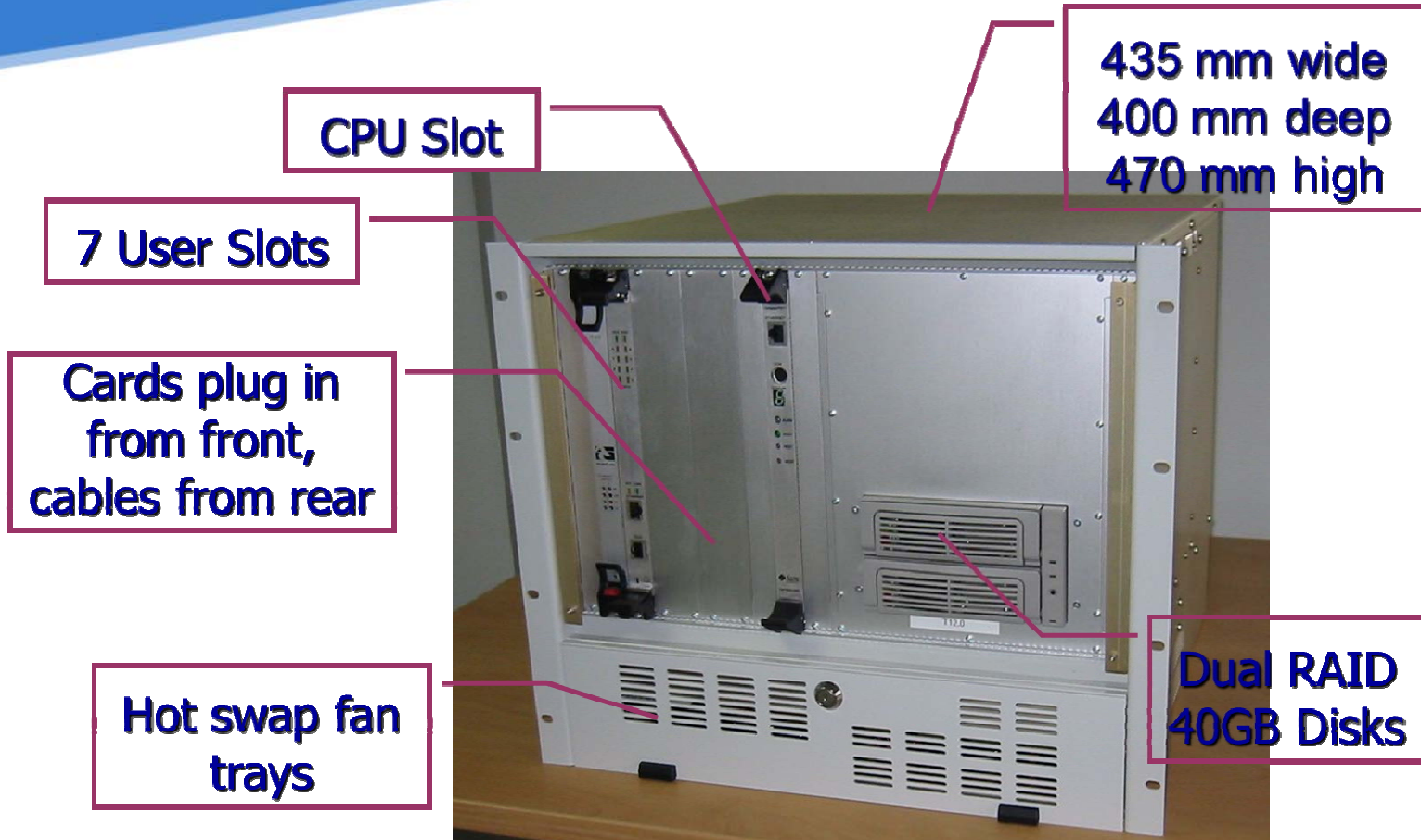
**High Capacity,
High Reliability
Switching**

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Key Benefits

- Higher capacity & higher density
 - up to 56 x E1 TDM, 16 x E1 VoIP in 9U of rack
- Higher reliability – Solaris, hot swap etc
- TDM, VoIP, SS7, Calling Card all in same box
- E1 ports can be ISDN/Q931, SS7 or R2
- Lower per port cost
- More flexible SS7 support

Switch Layout (Front)

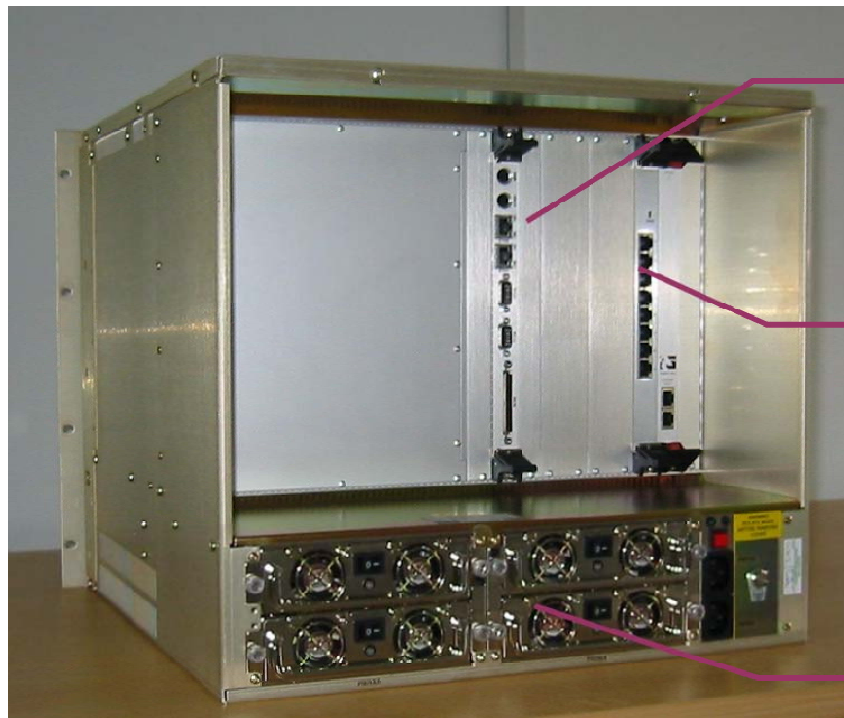


Switch Layout (Front)



In operation panel covers the cards

Switch Layout (Rear)



**Rear I/O cards
take the cables**

**No need to remove
cables (I/O cards
won't fail)**

**Dual (or 4)
PSUs**

Processor Card

- Sun Sparc lli 440MHz processor
- At least 4 times more powerful than INx's current Intel CPU
- Runs Solaris operating system (Most popular OS for high reliability projects)

Improved SS7 Support

- Totally 'soft' SS7
- SS7 now available on any E1 port
- Reconfigure on the fly between ISDN & SS7
- Uses existing (proven) WTL ISUP software

Chassis Interconnect Options

- High Speed Ethernet Connections
- Chassis connected via standard 100Mb Ethernet switch
- Will allow interconnection of 64 switches with up to 64 E1s (= max 4096 E1 switch)

Compatibility

- Full compatibility between INx and IPNx networks
- Databases shared
- SS7 Signalling shared
- VoIP traffic carried end-to-end
 - Voice, Fax & modem compatibility from Inx to IPNx

Compatibility 2

- Note following features not currently supported on IPNx:
 - Analog ports
 - Internal modem (dial-up router needed for remote access)
 - 9.6K VoIP codec

System Design Rules

1. Maximum 7 card slots available (any combination possible but see next rule)
2. Maximum 16 E1s of VoIP supported per chassis (rest can be used for TDM)
3. Unless switch is plain TDM or LCR it must include a Voice Resource card.
4. Voice Resource cards have no physical ports (but remember they take up a slot)

System Design Rules 2

5. Voice Resource cards are dual purpose:
 - a) they offer VoIP
 - b) they support Calling Card and other voice processing applications. These two purposes can be freely mixed on the same card.
6. For typical Calling Card system number of voice resources should match number of incoming lines (eg 60 channels of voice resource needed for a 2 E1 in, 2 E1 out Calling Card system).
7. Include inter-chassis card if chassis needs to connect to another IPNx (but remember that they take up a slot).

Typical Systems

- 56 x E1 plain TDM switch (7 x 8 port E1 cards)
- 16 x VoIP (2 x 8 E1 + 480 channels of voice resource)
- 32 x E1 Calling Card (4 x 8 E1 + 480 channels of voice resource)
- ... or a mixture of the above