

Baseband R503

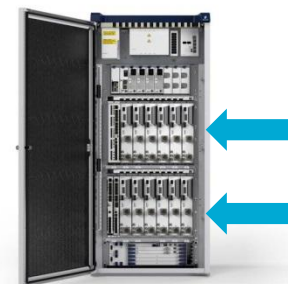
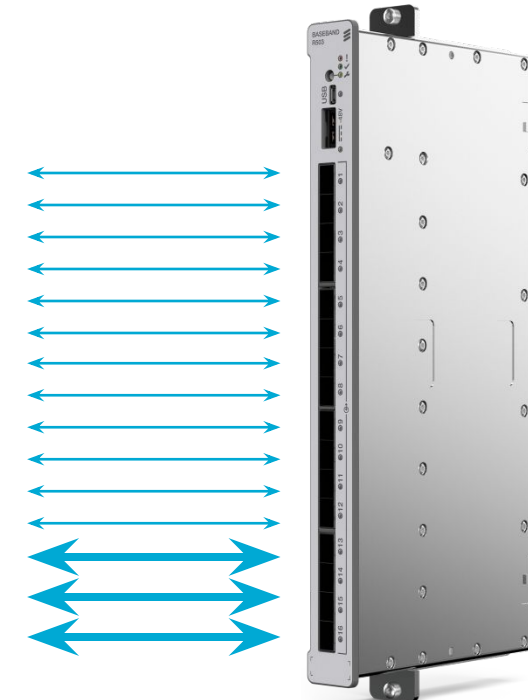
- › Increased connectivity for new & existing radio units in large radio configurations
- › CPRI multiplexing and de-multiplexing
 - 16 x SFP+ ports
 - › Pluggable optical transceivers
 - › Direct attach cables (electrical)



Baseband R503

To/from
Radio
RU/RRU/AIR

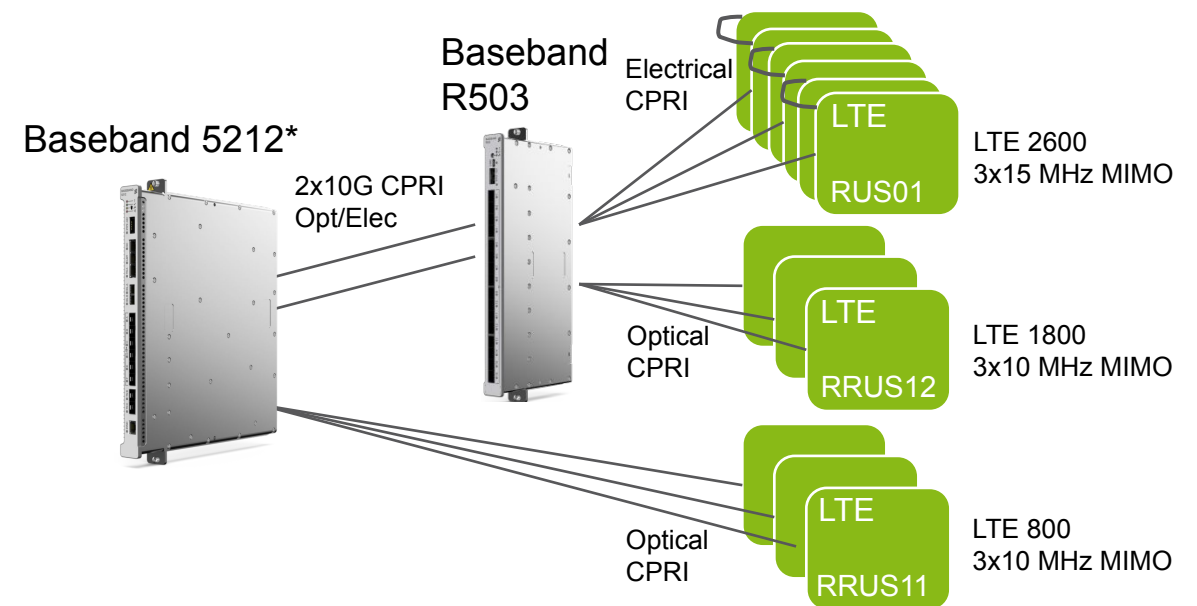
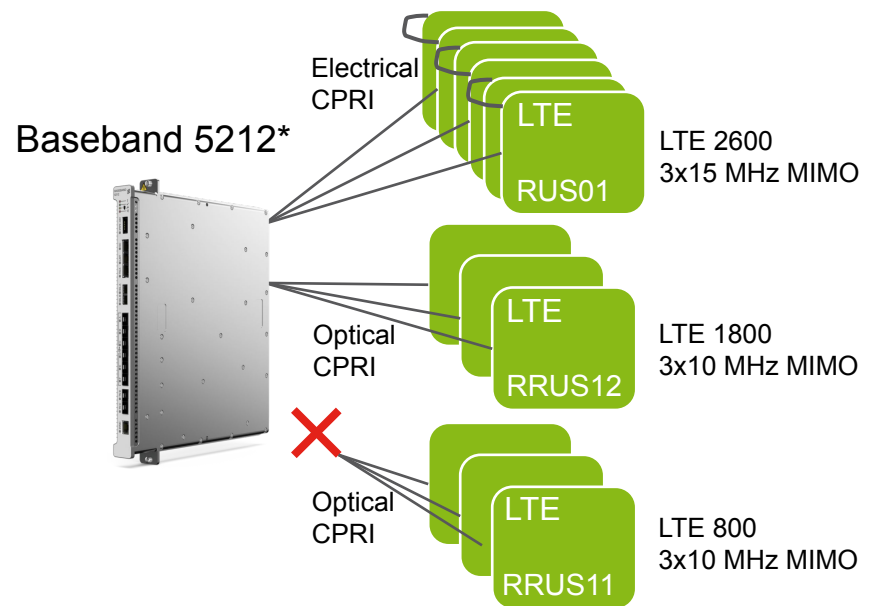
To/from
Baseband
Digital Unit



Baseband R503

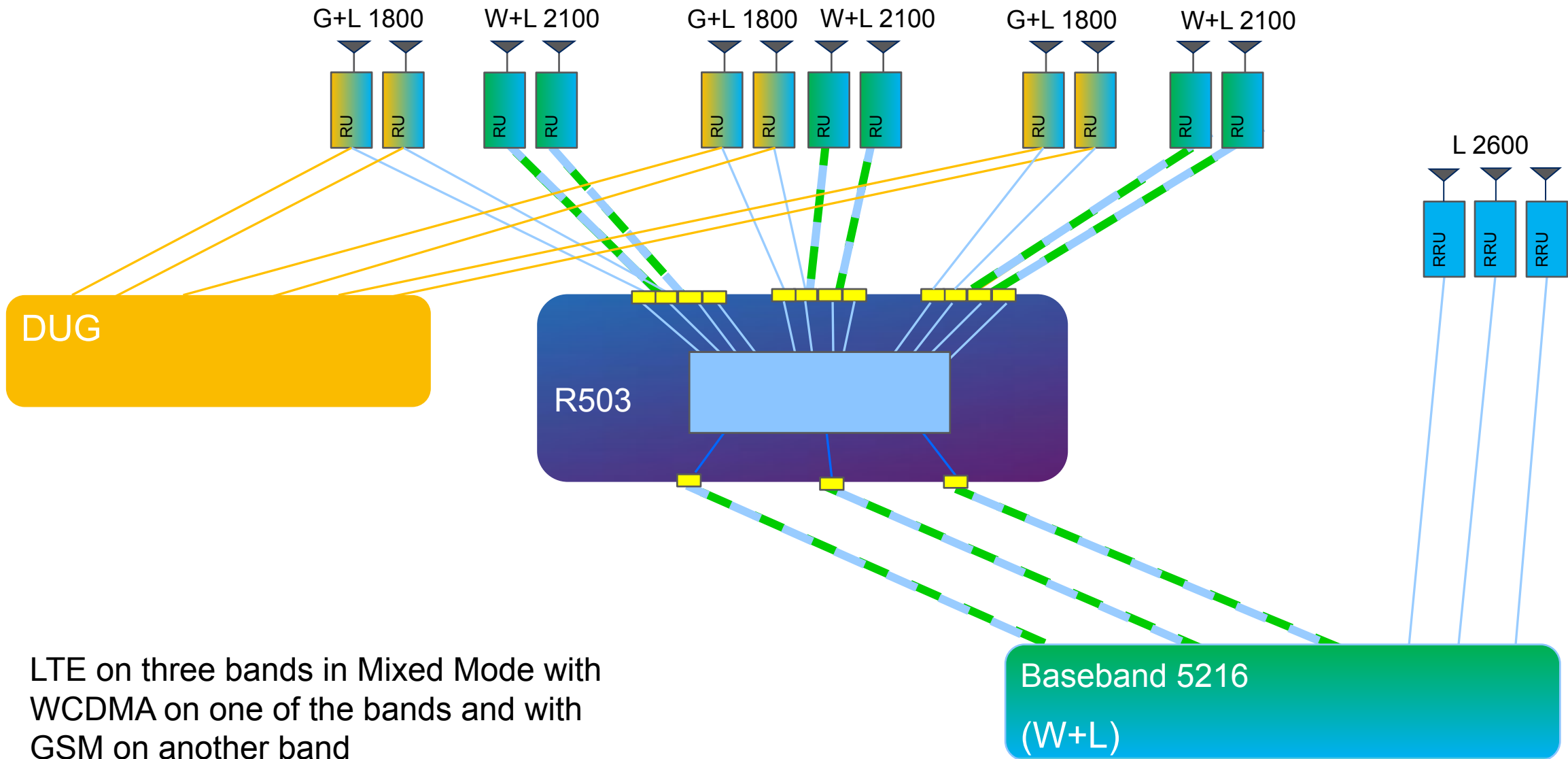


- › Increased connectivity for new & existing radio units in large radio configurations
 - CPRI multiplexing and de-multiplexing. 16 x SFP+ ports
 - › Pluggable optical transceivers
 - › Direct attach cables (electrical)



*or for example DUS31

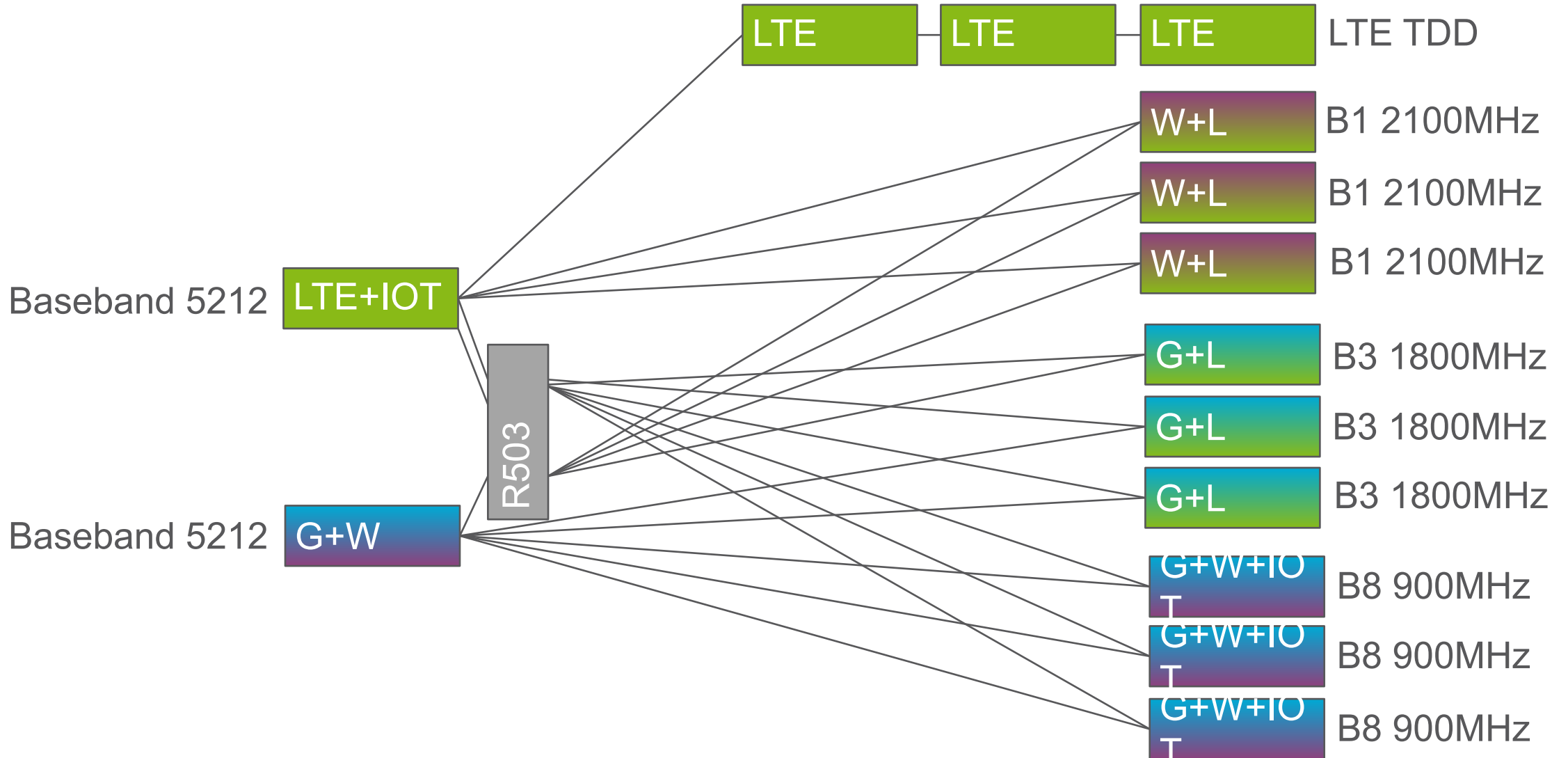
Baseband R503 – L16B Example



LTE on three bands in Mixed Mode with WCDMA on one of the bands and with GSM on another band

Five standards on 2x baseband 5212

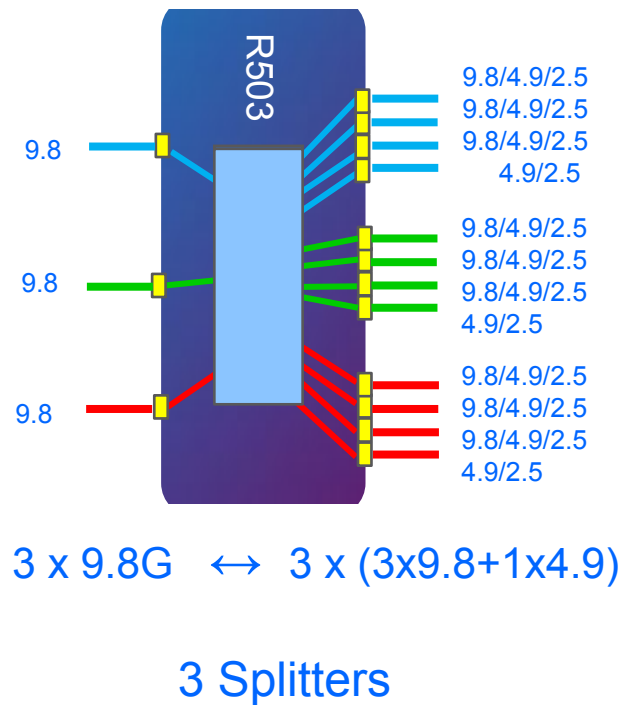
GSM WCDMA LTE TDD+FDD IOT



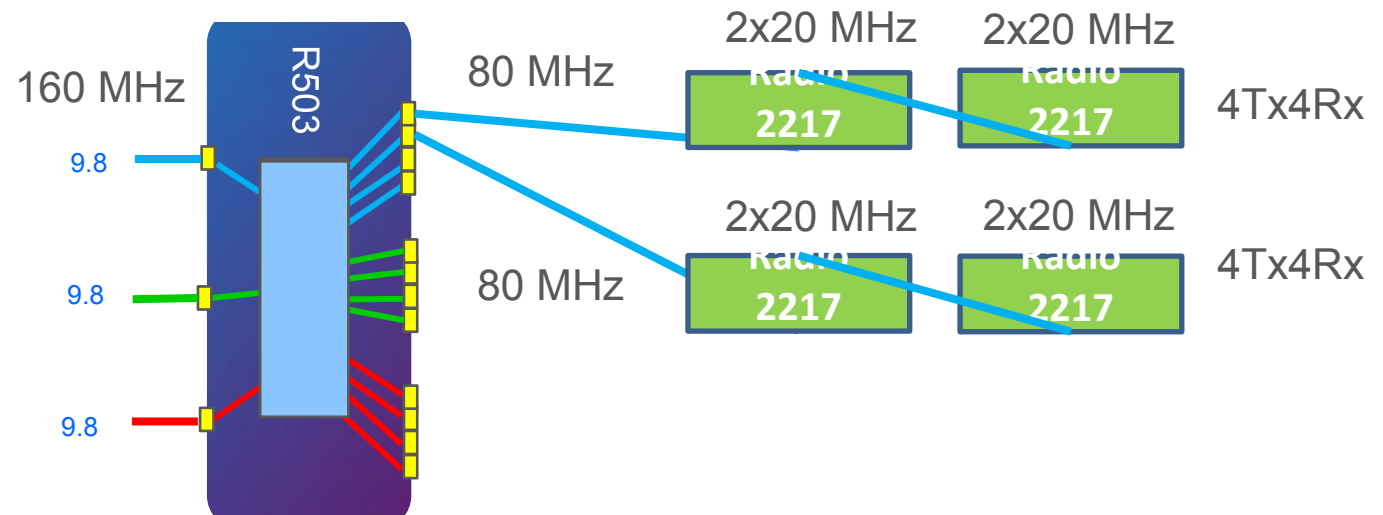


Baseband R503

INDICATIVE L16B CONFIGS



Example - Multiplex two partly filled 9.8G CPRI into one 9.8G



Baseband R503



› Generic platform for CPRI rearrangement

- Multiplexing / de-multiplexing
- Media conversion electrical <-> optical

› Flexible

- FPGA and ARM-based
- Upgradable
- Manageable
- Many possible locations in cabinet or at site

› CPRI Compression feature

- CPRI compression makes the CPRI link more efficient: more antenna bandwidth can be carried over the CPRI link. The feature is supported on Baseband 5216/5212. With the new generation of Radios, the feature is directly supported between the RU and Baseband 52xx. With legacy Radios, the feature can be supported with a Baseband R503 between the RU and Baseband 52xx.



The configured bandwidth per radio depends on the total bandwidth and on the number of cascaded radios. The total bandwidth depends on the CPRI bit rate. The bandwidth per radio is further divided if the radio has more than one TX ports (for example, 40 MHz means 2x20 MHz in case of two TX ports). Table 2 shows some examples.

Table 2 Bandwidth Configuration per Radio Unit

CPRI Bit Rate	Total Bandwidth	4 Radios in a Chain	2 Radios in a Chain
10 Gbps	160 MHz	40 MHz per radio	80 MHz per radio
5 Gbps	80 MHz	20 MHz per radio	40 MHz per radio
2.5 Gbps	40 MHz	10 MHz per radio	20 MHz per radio