

3GPP TSG RAN WG1 Meeting #87
Reno, U.S.A, 14th – 18th November 2016
Agenda item: 6.2.2.3

R1-1613206

WF on CDM Aggregation for 32 and 24 CSI-RS ports

ZTE, ZTE Microelectronics,
Qualcomm, Intel

Background

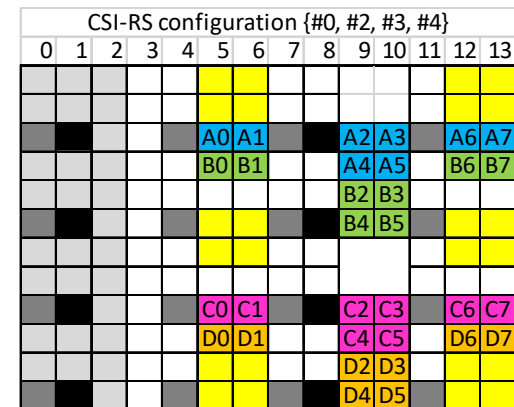
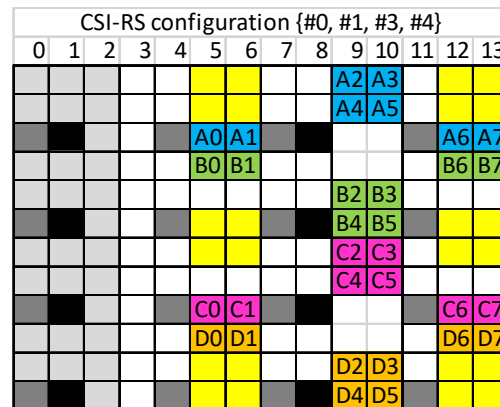
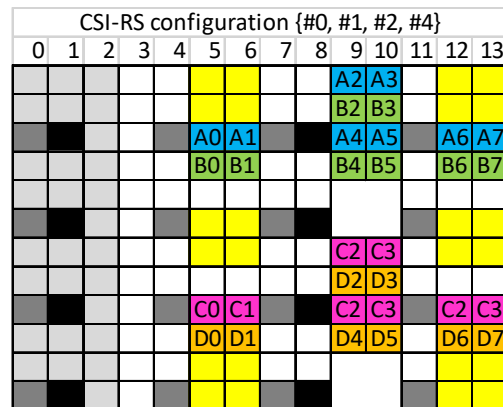
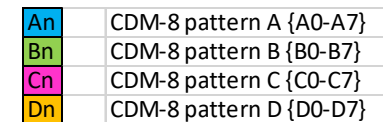
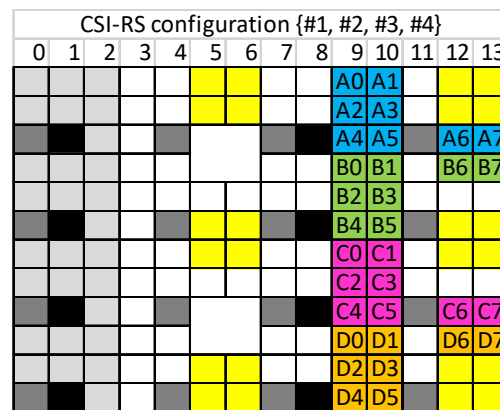
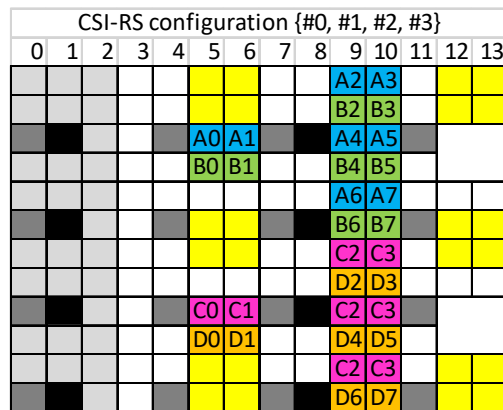
- Agreements at RAN1#86bis
 - FFS on additional CDM-4 pattern(s) at least for 28- and 32-port to support full power utilization within a single PRB.
 - CDM-8 design for {24, 32} ports:
 - At least for 32-port CSI-RS, at least one CDM-8 pattern exists which uses REs from more than 2 OFDM symbols
 - FFS until RAN1#87:
 - which CDM-8 patterns are useful, and
 - downselection between:
 - » Alt 1: CDM-8 patterns are configured by aggregation of CDM-2/4 patterns
 - » Alt 2: CDM-8 patterns are defined in the specifications without explicit aggregation
 - Overhead reduction for CDM-8 is FFS
 - Note: CDM-8 can be supported in both normal and special subframes

Proposal

- CDM-8 patterns for {24, 32} ports is defined in the specifications without explicit RRC parameter.
 - A single CDM-8 pattern is defined for each of the total five different RE configurations of a 32-port CSI-RS resource
 - E.g., same CDM-8 pattern is used when the same resourceConfigs are used for 32-ports CSI-RS resource, e.g., not dependent on the order of resourceConfigs.
 - All defined patterns should achieve full power utilization with 6dB power boosting
 - Examples are provided in the following slide
 - FFS on CDM-8 pattern for 24-ports CSI-RS

Examples

- CDM-8 pattern for 32-ports



Examples

- CDM-8 patterns for 24 ports

