RCF Connections

NOTES:

- This table shows connections for the full BEMC and EEMC systems
- The FPD layer-0 connections are to PECL fanout boards, not DSMs, since the electronics for that system is out in the hall not on the platform. Each half of the FPD system (East and West) will get 1 RCF cable from the platform with RHIC Clock phase-0. That signal will be fanned out locally, using the PECL fanout boards, to feed 11 layer-0 DSMs.
- The maximum number of RCF boards that can be connected in the current system is 6. Since 6 RCF boards are listed in the table this part of the system is now at full capacity.
- The maximum number of connections for each half (a or b) of any RCF board is 12. Seven of the twelve RCF halves (1a, 1b, 4a, 4b, 5a, 5b and 2a) are therefore already filled.

DSM Tree Layer	RCF	RHIC Clock Phase	Number of Used Connections	DSM Boards/TCU
0	1a	0	12	CTB (8 DSMs), MWC (4 DSMs)
0	1b	0	12	CTB (8 DSMs), MWC (4 DSMs)
0	4a	0	12	BCW (12 DSMs)
0	4b	0	12	BCW (3 DSMs), BCE (9 DSMs)
0	5a	0	12	BCE (6 DSMs), EEC (6 DSMs)
0	5b	0	12	BBC (6 DSMs), ZDC (3 DSMs), EEC (3 DSMs)
0	6b	0	2	FPE (1 PECL Fanout), FPW (1 PECL Fanout)
1	2a	1	12	CTB (2 DSMs), MWC (2 DSMs), BEMC (6 DSMs), EEMC (2 DSMs)
1	6a	1	7	BBC (2 DSMs), ZDC, FPE (2 DSMs), FPW(2 DSMs)
2	2b	0	7	MULT (CTB+MWC), VTX, Special Triggers, EMC (BEMC+EEMC), Bunch Crossing 1 and Bunch Crossing 2, FPD
3	3a	1	1	Last DSM
4	3b	0	4	TCU, Scalar Patch Panel (3 connections)