

Figure 1: pegasus\_v\_chimera\_uc.tikz: shows extra edges added to chimera unit cell to make Pegasus unit cell

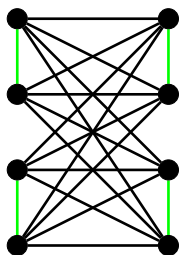


Figure 2: pegasus\_v\_chimera\_uc\_k44.tikz: shows extra edges added to chimera unit cell to make Pegasus unit cell

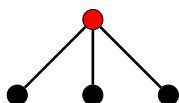


Figure 3: all\_to\_aux.tikz

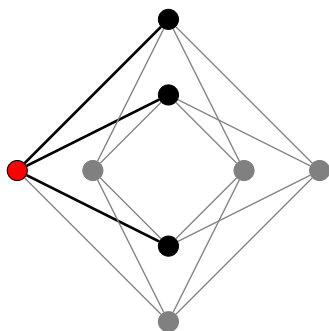


Figure 4: all\_to\_aux\_chimera.tikz

Gadgets with adjacency graph corresponding to all\_to\_aux.tikz( $\text{red\_node}$ ):

- NTR-KZFD
- NTR-ABCG

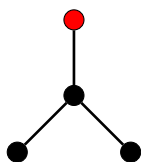


Figure 5: logical\_fork.tikz

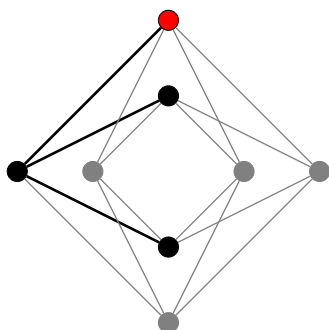


Figure 6: logical\_fork\_chimera.tikz

Gadgets with adjacency graph corresponding to logical\_fork.tikz( $\text{red\_node}$ ):

- NTR-ABCB

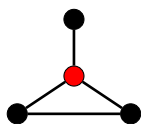


Figure 7: k4\_missing\_2edge.tikz

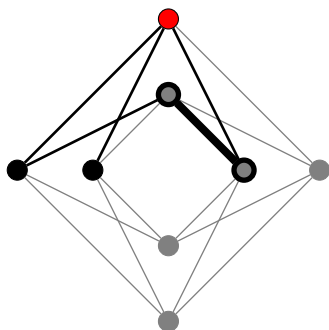


Figure 8: k4\_missing\_2edge\_chimera.tikz

Gadgets with adjacency graph corresponding to k4\_missing\_2edge.tikz(

- Asymmetric reduction

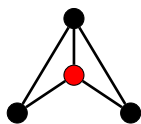


Figure 9: k4\_missing\_edge.tikz

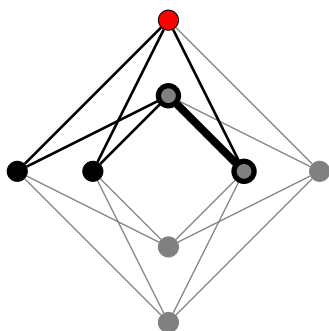


Figure 10: k4\_missing\_edge\_chimera.tikz

Gadgets with adjacency graph corresponding to `k4_missing_edge.tikz` ():

- Asymmetric cubic reduction

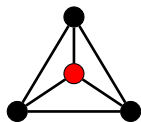


Figure 11: `k4.tikz`

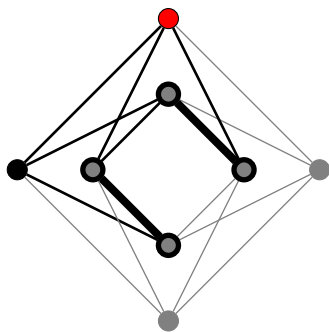



Figure 12: `k4_chimera.tikz`

Gadgets with adjacency graph corresponding to `k4.tikz` ():

- PTR-Ishikawa
- PTR-BCR (1-4)
- PTR-KZ
- Z version of PTR-KZ

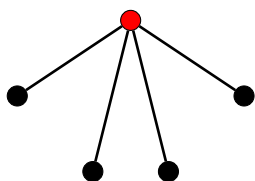


Figure 13: `all_to_aux4.tikz`

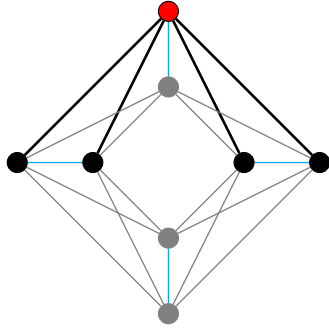


Figure 14: all\_to\_aux4.inPegasus.tikz

Gadgets with adjacency graph corresponding to all\_to\_aux4.tikz():

- NTR-KZFD

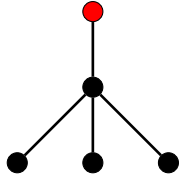


Figure 15: logical\_fork3.tikz

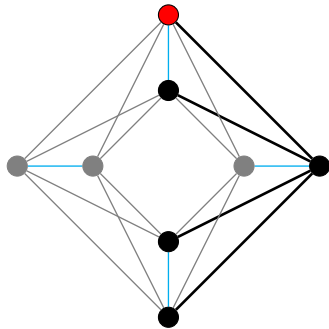


Figure 16: logical\_fork3.inPegasus.tikz

Gadgets with adjacency graph corresponding to logical\_fork3.tikz():

- NTR-ABCB

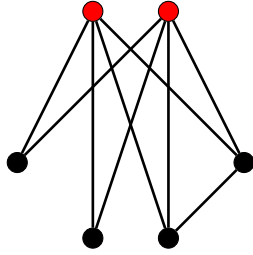


Figure 17: 2aux\_to\_all4\_1conn.tikz

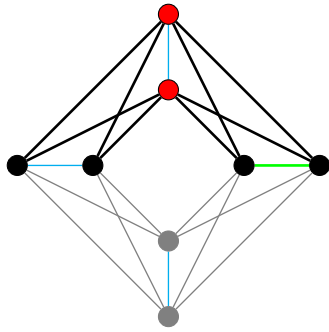


Figure 18: 2aux\_to\_all4\_1conn\_inPegasus.tikz

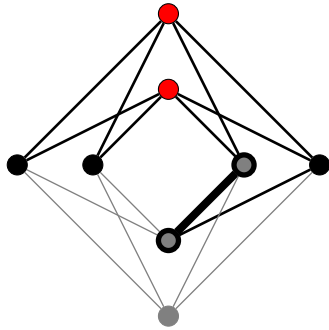



Figure 19: 2aux\_to\_all4\_1conn\_inChimera.tikz

Gadgets with adjacency graph corresponding to 2aux\_to\_all4\_1conn.tikz():

- positive term reduction

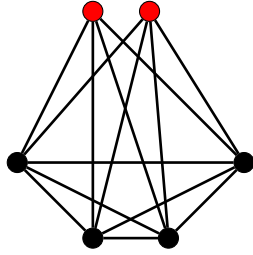


Figure 20: 2aux\_to\_all4\_allConn.tikz

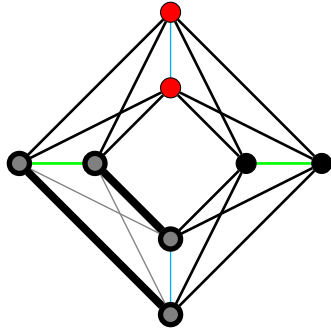


Figure 21: 2aux\_to\_all4\_allConn\_inPegasus.tikz

Gadgets with adjacency graph corresponding to 2aux\_to\_all4\_allConn.tikz ():

- PTR-Ishikawa

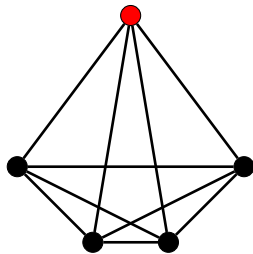


Figure 22: aux\_to\_all4\_allConn.tikz

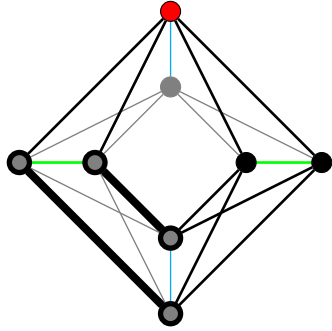


Figure 23: aux\_to\_all4\_allConn.inPegasus.tikz

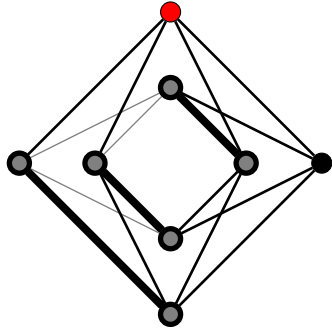



Figure 24: aux\_to\_all4\_allConn.inChimera.tikz

Gadgets with adjacency graph corresponding to aux\_to\_all4\_allConn.tikz():

- PTR-BCR-2
- PTR-BCR-4

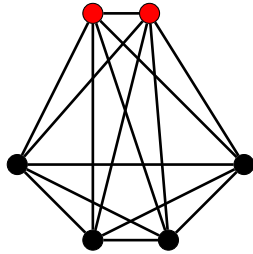


Figure 25: 2auxConn\_to\_all4\_allConn.tikz



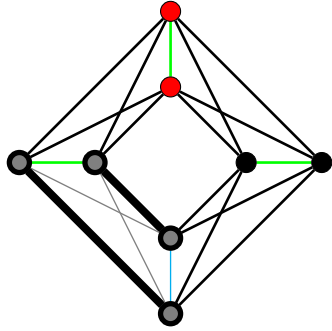



Figure 26: 2auxConn\_to\_all4\_allConn\_inPegasus.tikz

Gadgets with adjacency graph corresponding to 2auxConn\_to\_all4\_allConn.tikz():

- PTR-BCR-3

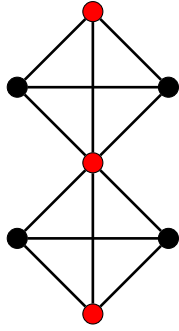


Figure 27: 2k4\_shared\_aux.tikz

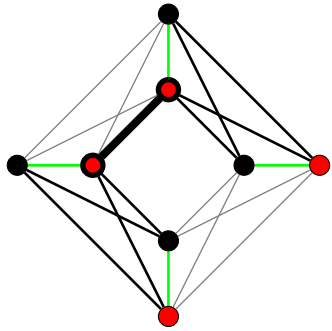


Figure 28: 2k4\_shared\_aux\_inPegasus.tikz

Gadgets with adjacency graph corresponding to 2k4.shared\_aux.tikz():

- Two copies of PTR-KZ sharing an auxilla
- Two copies of z-version of PTR-KZ sharing an auxilla