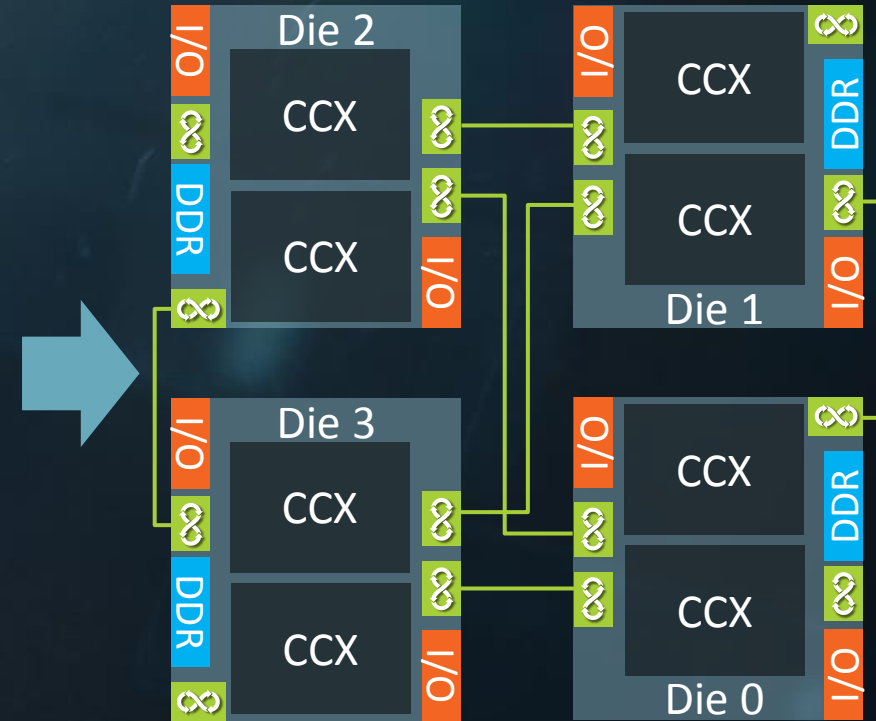


MCM VS. MONOLITHIC

- MCM approach has many advantages
 - Higher yield, enables increased feature-set
 - Multi-product leverage
- EPYC™ Processors
 - 4x 213mm² die/package = 852mm² Si/package*
- Hypothetical EPYC Monolithic
 - ~777mm²*
 - Remove die-to-die Infinity Fabric PHYs and logic (4/die), duplicated logic, etc.
 - 852mm² / 777mm² = ~10% MCM area overhead
- Inverse-exponential reduction in yield with die size
 - Multiple small dies has inherent yield advantage



32C Die Cost
1.0X



32C Die Cost
0.59X¹

MCM Delivers Higher Yields, Increases Peak Compute, Maximizes Platform Value