Corr. Quadrant # 1
LTA & Station Controllers

Corr. Quadrant # 2
LTA & Station Controllers

Corr. Quadrant # 3
LTA & Station Controllers

Corr. Quadrant # 4
LTA & Station Controllers

VME Correlator Control Computer (CCC) PowerPC

CAN Busses (4 or 8)

~32 CAN nodes per Quadrant

Beowulf Data Processing Computer (CDP)
Each compute node:
- Dual CPU Pentium 4/Athlon 1.0+ GHz
- 66 MHz PCI
- 16.67 MHz FPDP
- High Speed (Gigabit) Ethernet
- Real-time Linux
- MPI among nodes

Note: Beowulf network switches TBD

Beowulf Master
- Network Bridge
- ACS/CORBA to Archive

Configuration Parameters via Ethernet

Ethernet

Science & Monitor Data Archive

Array Control Computer (ACC)

48 ms TE (also to correlator HW)

ALMA Baseline Correlator Computer Systems

April 8, 2002