

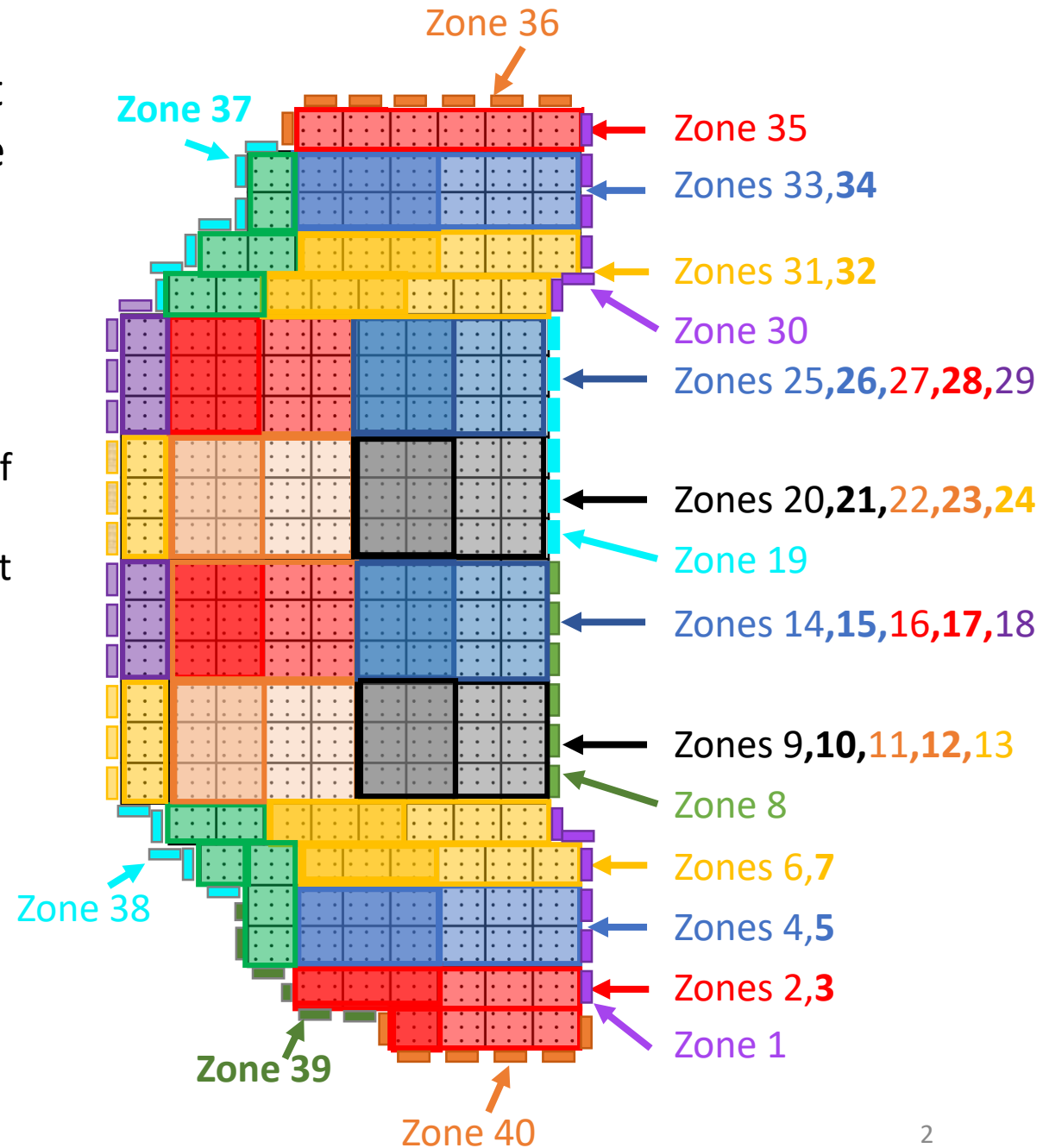
Hall A ECAL
Heater Zones
Don Jones

- Each supermodule has 2x50W plate heater.
- Each Al bar has a 40W cartridge heater in the front side and half of them have a second 40W cartridge heater halfway along crystal length for a total of 3x40W per pair.

Option 1 for power with dimmable LED drivers:

40 zones using 600W 12.5A Power Supply ([HLG-600H-48AB](#)).

- 40 supplies (zones): limited to 12.5A per supply. 24kW of power available
- All zones with only supermodule front heaters will run at the full 48VDC (drawing 11.5A per zone)
- Zones with boundary aluminum bars will not be able to run at 48VDC due to current limits.
 - Intentional because not expected to be needed
 - Eg. Zone 40 limited to 90W per pair of aluminum bars.
 - 60-70W should be sufficient based on prototype
 - If we need more power, all boundary heat wires go directly to exterior and we could thus change the zoning and add power supplies from outside.



- Each supermodule has 2x50W plate heater.
- Each Al bar has a 40W cartridge heater in the front side and half of them have a second 40W cartridge heater halfway along crystal length for a total of 3x40W per pair.

Option 2 for power with dimmable LED drivers:

480W 10.0A Power Supply ([HLG-480H-48AB](#))

- 49 supplies(zones): limited to 10.0A per supply for a total of 24kW available
- All zones with only supermodule front heaters will run at the full 48VDC (drawing 9.6A per zone)
- Zones with boundary aluminum bars will not be able to run at 48VDC due to current limits.
 - Intentional because not expected to be needed
 - Eg. Zone 1 limited to 90W per pair of aluminum bars.
- 60-70W should be sufficient based on prototype
- If we need more power, all boundary heat wires go directly to exterior allowing additional power supplies to be easily connected

