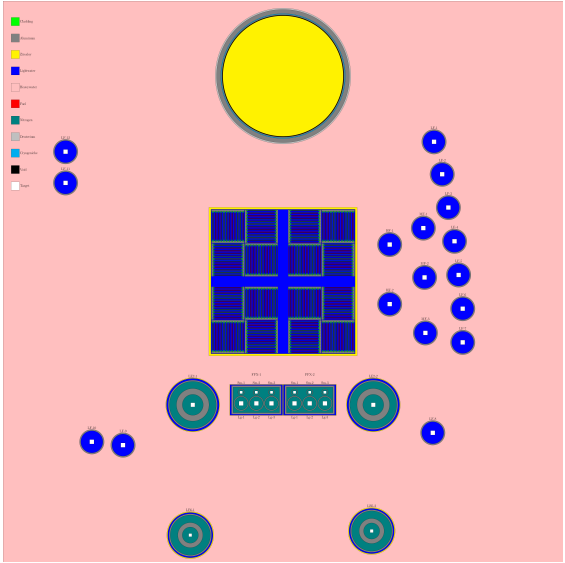
Open Pool Australian Light Water (OPAL) Reactor

- 20 $\mathrm{MW_{th}}$ open pool type light water research reactor
- Australian Nuclear Science and Technology Organisation (ANSTO) in Sydney, AU
- Officially opened April 2007 replacing High Flux Australian Reactor (HIFAR)
- Multi-purpose facility: neutron beams, radiopharmaceuticals, irradiation of materials
- Heavy water ($\mathrm{D_2O}$) neutron reflector
- LEU (19.8% $^{235}\mathrm{U}$) $\mathrm{U_3Si_2}$ fuel on Al plates
- Maximum neutron irradiation flux: $\phi_{\mathrm{th}} \lesssim 3 \times 10^{14}\ \mathrm{n/cm^2/s}$
- 30-35 day cycles with 5-day shutdown for refueling or reshuffling