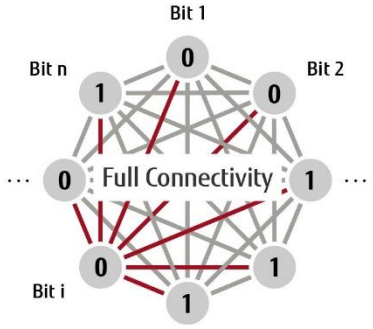
Fujitsu Digital Annealer

- We got a meeting with Fujitsu yesterday.
- Their machine is "Classical Annealing" with a digital circuit.
  - This is not a Quantum Computer.
    - Similar to "Hitachi CMOS annealing" (its seminar the next Tuesday)
  - It can do optimization using Ising model, which is similar to D-wave.

- Feature : http://www.fujitsu.com/global/digitalannealer/superiority/
  - Normal room temperature. (We don't need a cold matter…)
  - Small form factor (DAU(2nd gen) is built on a PCI-Express card-like board.)
    → Fujitsu started an on-premises service from the 22nd Feb, 2019.
  - Fully coupled 8192 (=2^{13})-"q"bits
  - For coefficients, we can use up to 64-bit (=2^{64}) gradations.
    - 64-bit for 4096 "q"bits
    - 32-bit for 8192 "q"bits



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Prospect

- Using multi DAU(2nd gen) chips, we can use such a machine for problems requiring 100k bit's.
- Moreover, by using both multi DAU(2nd gen) and software, Fujitsu will provide a machinery to solve 1M bit problem until the end of March 2020.
- Fujitsu is developing the 3rd generation but no clear info.

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