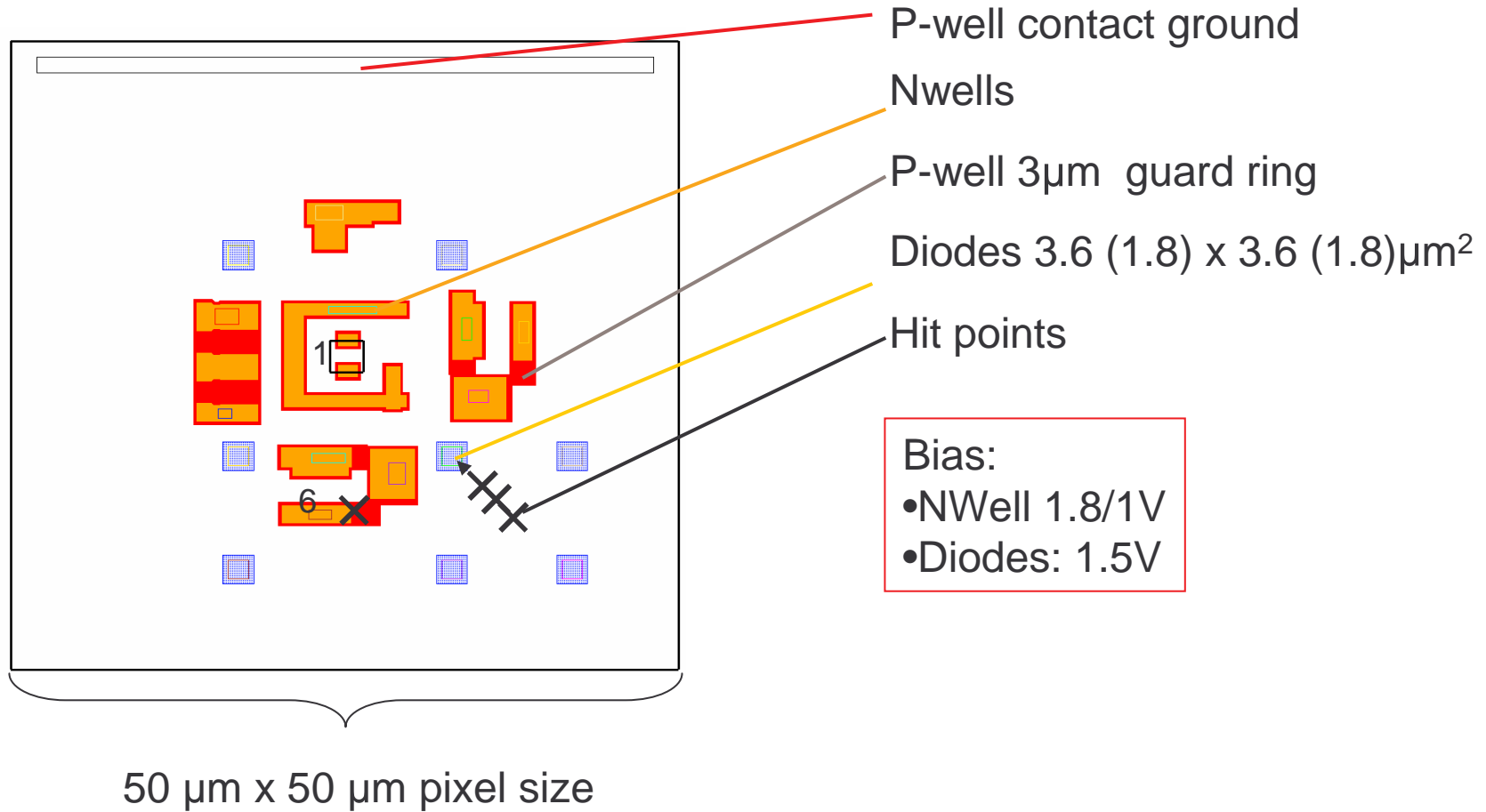
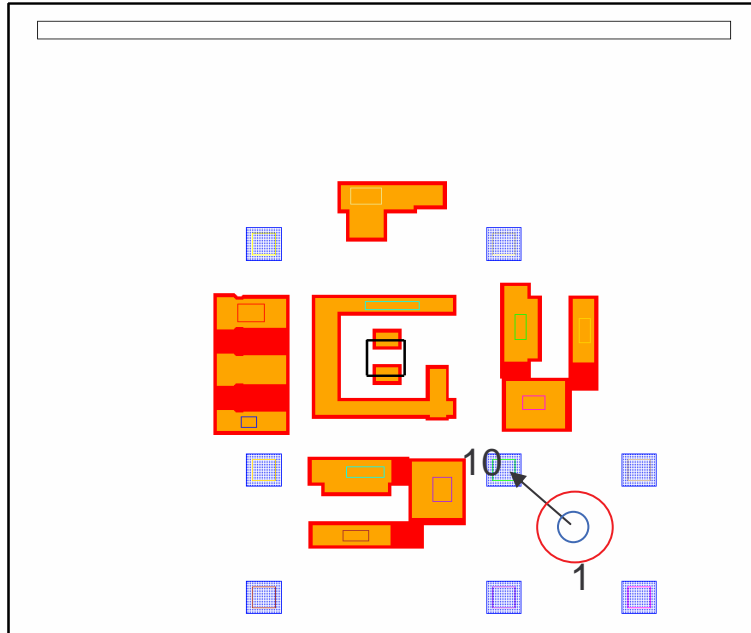


CALICE pixel Deep P-Well results



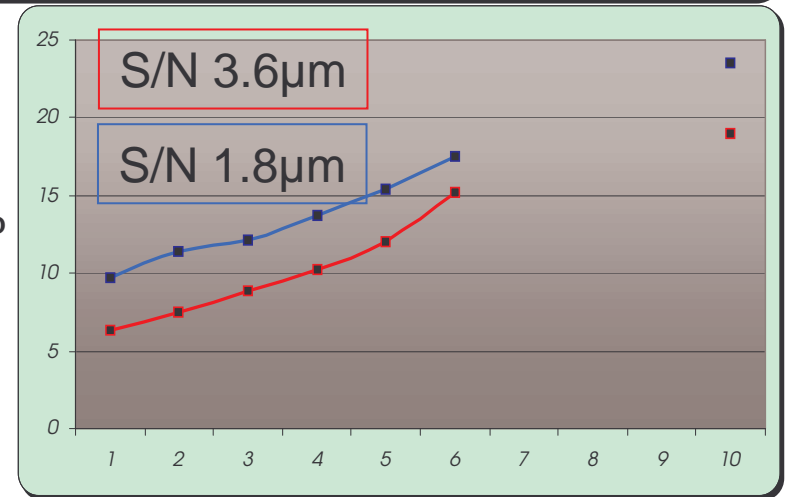
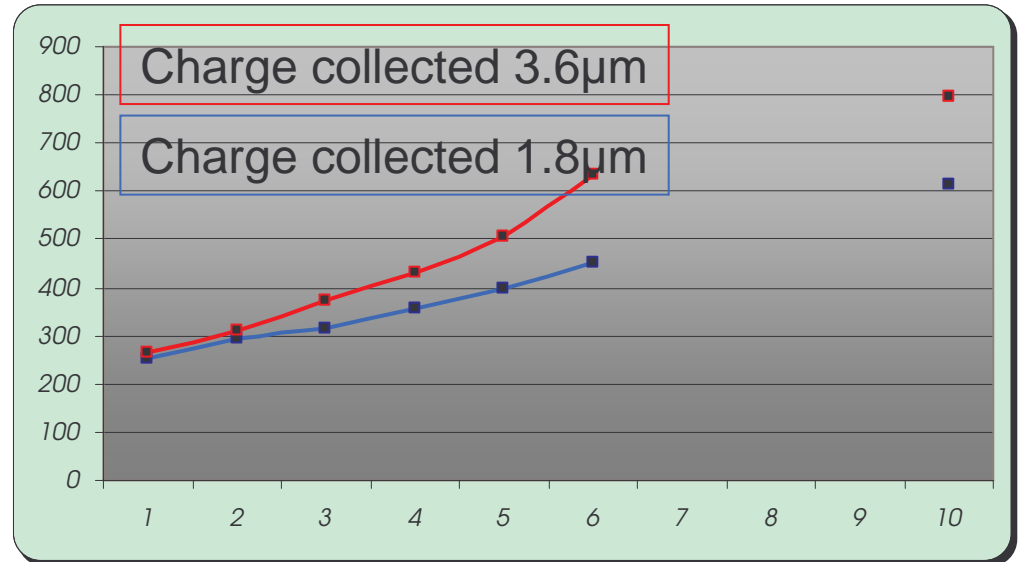
CALICE pixel Deep P-Well results



S/N < 10 area for 1.8 and 3.6 μm diode size

$N \approx 26e^-$ \circ $d \approx 0.2\mu\text{m}$ \rightarrow $S = 0.125\mu^2$ 0.005%

$N \approx 42e^-$ \bigcirc $d \approx 2.8\mu\text{m}$ \rightarrow $S = 24.63\mu^2$ 1%



CALICE pixel Deep P-Well results

Conclusions

- The final layout shows good performances in terms of charge collection, with smaller diode size $1.8\mu\text{m}$ giving better S/N
- Area of $S/N < 10$ around 1% with $3.6\mu\text{m}$ diode size, negligible with $1.8\mu\text{m}$
- Collection time still well below 200 ns in both cases
- **Next step:**
- Full layout simulation 3x3 pixels if possible