# SPD Datasheet

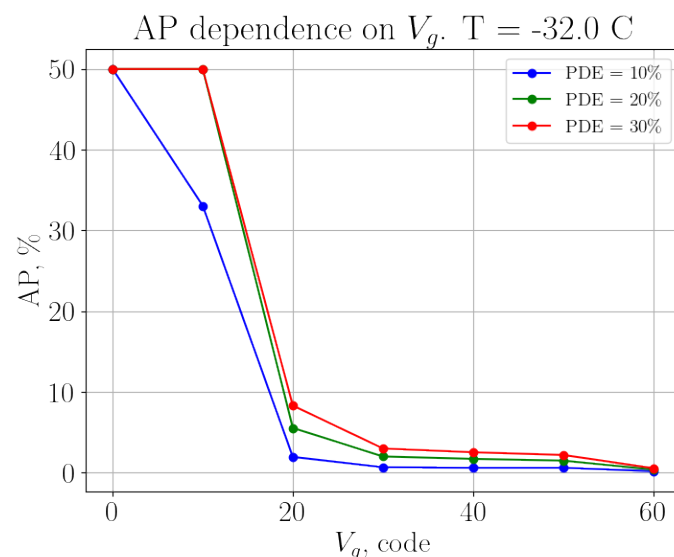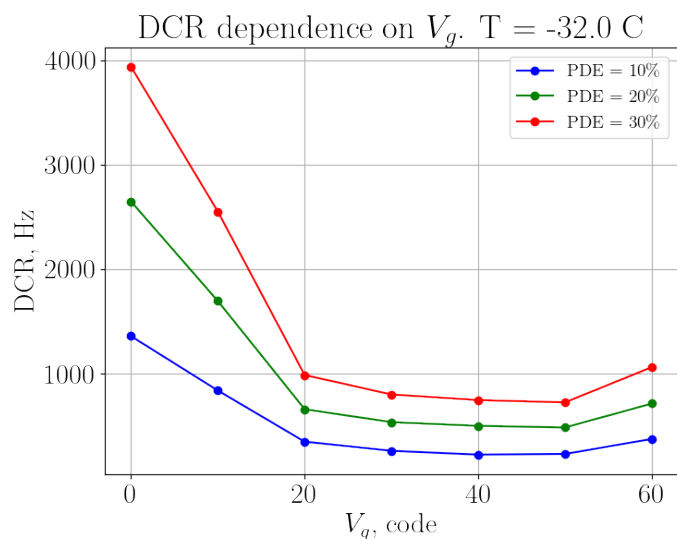SPD type: gated                SPD Name: IVANUSHKA                Date: 10.11.2021

Optimal point                T = -32.0 C

| Criterion | PDE, % | DCR, Hz | SNR | AP, % | DT, mus | TR, ps | BIF, % |
|---|---|---|---|---|---|---|---|
| QE = 10 | 10 | 224 | 0.0447 | 0.6 | 4.79 | 1740 | 0.6 |
| QE = 20 | 20 | 484 | 0.0413 | 1.49 | 4.81 | 2060 | 1.4 |
| QE = 30 | 30 | 725 | 0.0414 | 2.2 | 4.81 | 2060 | 1.4 |

| Criterion | Vg, code | Vb, V | T, C |
|---|---|---|---|
| QE = 10 | 40 | 62.66 | -32.0 |
| QE = 20 | 50 | 61.57 | -32.0 |
| QE = 30 | 50 | 63.15 | -32.0 |

## Graphic characteristics representation



SNR heatmap for T = -32.0 C



BIF heatmap for T = -32.0 C



DCR dependence on $V_g$. T = -32.0 C



AP dependence on $V_g$. T = -32.0 C

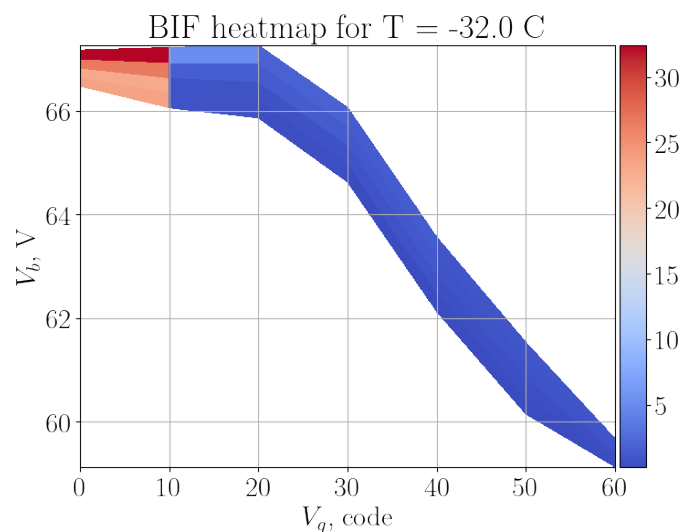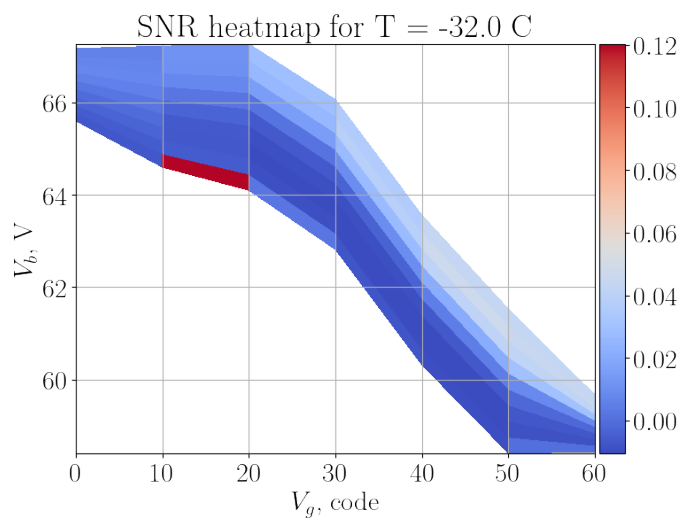# SPD Datasheet

SPD type: gated          SPD Name: IVANUSHKA          Date: 10.11.2021

Optimal point                    T = -26.0 C

| Criterion | PDE, % | DCR, Hz | SNR | AP, % | DT, mus | TR, ps | BIF, % |
|-----------|--------|---------|-------|-------|---------|--------|--------|
| QE = 10 | 10 | 278 | 0.036 | 0.43 | 4.87 | 1800 | 0.6 |
| QE = 20 | 20 | 527 | 0.038 | 1.17 | 4.87 | 1650 | 0.8 |
| QE = 30 | 30 | 789 | 0.038 | 1.74 | 4.87 | 1650 | 0.8 |

| Criterion | Vg, code | Vb, V | T, C |
|-----------|----------|-------|-------|
| QE = 10 | 50 | 61.23 | -26.0 |
| QE = 20 | 50 | 62.42 | -26.0 |
| QE = 30 | 50 | 64.19 | -26.0 |

## Graphic characteristics representation



SNR heatmap for T = -26.0 C



BIF heatmap for T = -26.0 C



DCR dependence on $V_g$. T = -26.0 C



AP dependence on $V_g$. T = -26.0 C

# SPD Datasheet
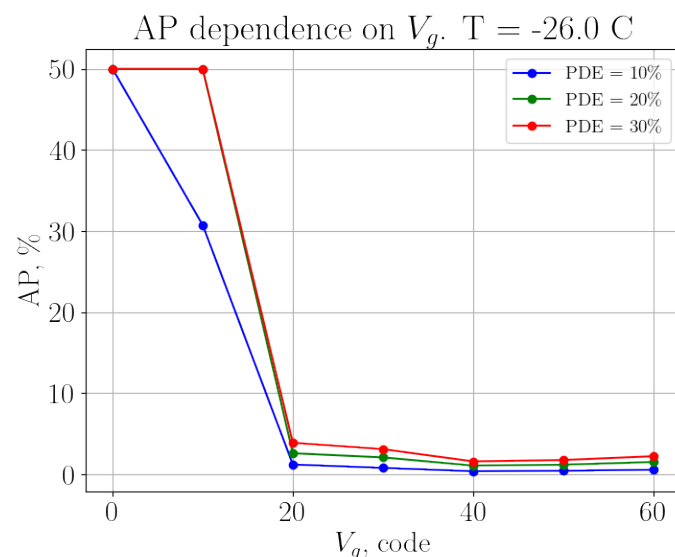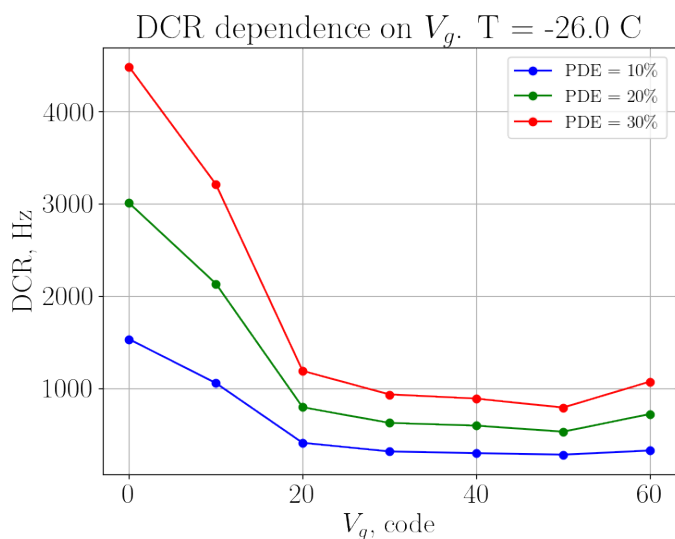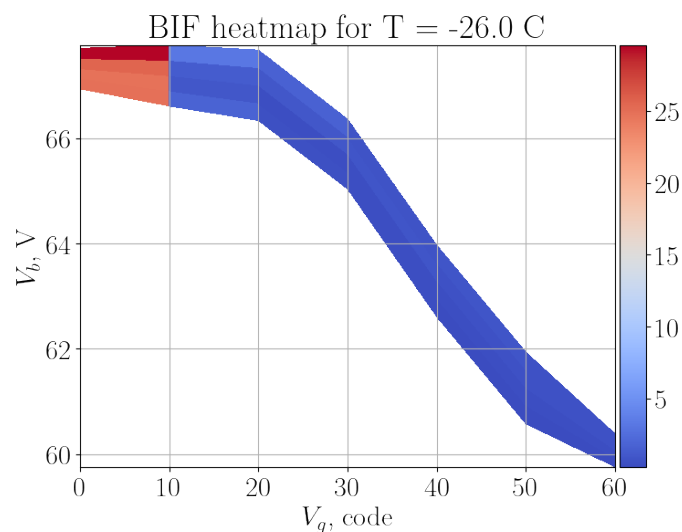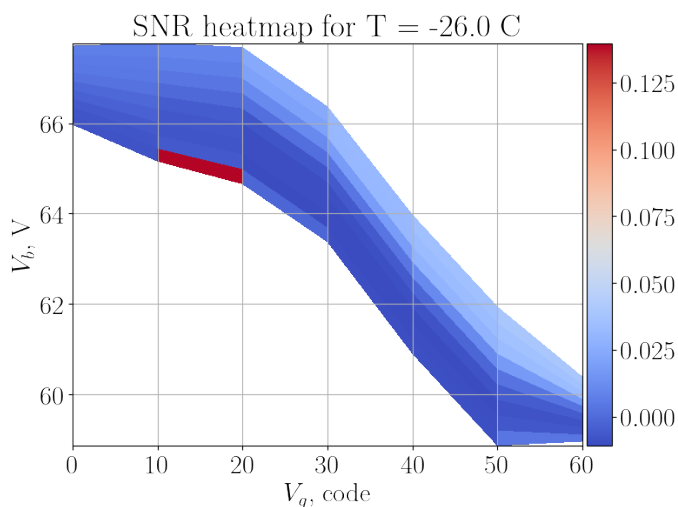
SPD type: gated     SPD Name: IVANUSHKA     Date: 10.11.2021

Optimal point     T = -20.0 C

| Criterion | PDE, % | DCR, Hz | SNR | AP, % | DT, mus | TR, ps | BIF, % |
|-----------|--------|---------|--------|-------|---------|--------|--------|
| QE = 10   | 10     | 295     | 0.0339 | 0.42  | 4.84    | 1800   | 0.8    |
| QE = 20   | 20     | 651     | 0.0307 | 0.99  | 4.74    | 1990   | 0.6    |
| QE = 30   | 30     | 973     | 0.0308 | 1.48  | 4.74    | 1990   | 0.6    |

| Criterion | Vg, code | Vb, V | T, C  |
|-----------|----------|-------|-------|
| QE = 10   | 40       | 63.97 | -20.0 |
| QE = 20   | 50       | 63.33 | -20.0 |
| QE = 30   | 50       | 65.17 | -20.0 |

## Graphic characteristics representation



SNR heatmap for T = -20.0 C



BIF heatmap for T = -20.0 C



DCR dependence on $V_g$. T = -20.0 C



AP dependence on $V_g$. T = -20.0 C