| Group | C_FB (pF) | C_IN (pF) | Noise (uVrms) | DC Gain (dB) | Settling time (ns) | BW_CL (MHz) | GBW (MHz) | BW_OL (kHz) | I_SLEW (mA) | gm (mS) |
|-------|-----------|-----------|---------------|--------------|--------------------|-------------|-----------|-------------|-------------|---------|
| 1     | 0.23      | 2.34      | 994.09        | 88.78        | 10.00              | 62.26       | 622.62    | 22.65       | 0.39        | 7.82    |
| 2     | 0.23      | 2.34      | 994.09        | 86.84        | 10.00              | 60.74       | 607.45    | 27.63       | 0.38        | 7.63    |
| 3     | 0.23      | 2.34      | 994.09        | 86.84        | 9.09               | 65.30       | 652.96    | 29.69       | 0.41        | 8.21    |
| 4     | 0.23      | 2.34      | 994.09        | 85.26        | 9.09               | 63.89       | 638.95    | 34.87       | 0.40        | 8.03    |
| 5     | 0.23      | 2.34      | 994.09        | 85.26        | 8.33               | 68.29       | 682.88    | 37.27       | 0.43        | 8.58    |
| 6     | 0.23      | 2.34      | 994.09        | 83.92        | 8.33               | 66.97       | 669.70    | 42.65       | 0.42        | 8.42    |
| 7     | 0.23      | 2.34      | 994.09        | 83.92        | 7.69               | 71.22       | 712.16    | 45.35       | 0.45        | 8.95    |
| 8     | 0.23      | 2.34      | 994.09        | 88.78        | 7.69               | 61.98       | 619.82    | 22.55       | 0.39        | 7.79    |
| 9     | 0.23      | 2.34      | 994.09        | 88.78        | 7.14               | 65.88       | 658.76    | 23.96       | 0.41        | 8.28    |
| 10    | 0.23      | 2.34      | 994.09        | 86.84        | 7.14               | 65.04       | 650.35    | 29.58       | 0.41        | 8.17    |
| 11    | 0.23      | 2.34      | 994.09        | 86.84        | 6.67               | 68.81       | 688.12    | 31.29       | 0.43        | 8.65    |
| 12    | 0.23      | 2.34      | 994.09        | 85.26        | 6.67               | 67.97       | 679.75    | 37.10       | 0.43        | 8.54    |
| 13    | 0.23      | 2.34      | 994.09        | 85.26        | 6.25               | 71.64       | 716.43    | 39.10       | 0.45        | 9.00    |
| 14    | 0.23      | 2.34      | 994.09        | 83.92        | 6.25               | 70.81       | 708.08    | 45.09       | 0.44        | 8.90    |
| 15    | 0.37      | 3.73      | 789.63        | 85.26        | 10.00              | 55.81       | 558.09    | 30.46       | 0.44        | 8.77    |
| 16    | 0.37      | 3.73      | 789.63        | 83.92        | 10.00              | 54.78       | 547.81    | 34.89       | 0.43        | 8.61    |
| 17    | 0.37      | 3.73      | 789.63        | 83.92        | 9.09               | 59.20       | 591.98    | 37.70       | 0.46        | 9.30    |
| 18    | 0.37      | 3.73      | 789.63        | 82.76        | 9.09               | 58.20       | 581.98    | 42.36       | 0.46        | 9.14    |
| 19    | 0.37      | 3.73      | 789.63        | 82.76        | 8.33               | 62.46       | 624.56    | 45.46       | 0.49        | 9.81    |
| 20    | 0.37      | 3.73      | 789.63        | 81.74        | 8.33               | 61.48       | 614.76    | 50.34       | 0.48        | 9.66    |
| 21    | 0.37      | 3.73      | 789.63        | 81.74        | 7.69               | 65.59       | 655.90    | 53.71       | 0.52        | 10.30   |
| 22    | 0.37      | 3.73      | 789.63        | 85.26        | 7.69               | 61.98       | 619.82    | 33.83       | 0.49        | 9.74    |
| 23    | 0.37      | 3.73      | 789.63        | 85.26        | 7.14               | 65.88       | 658.76    | 35.95       | 0.52        | 10.35   |
| 24    | 0.37      | 3.73      | 789.63        | 83.92        | 7.14               | 65.04       | 650.35    | 41.42       | 0.51        | 10.22   |
| 25    | 0.37      | 3.73      | 789.63        | 83.92        | 6.67               | 68.81       | 688.12    | 43.82       | 0.54        | 10.81   |
| 26    | 0.37      | 3.73      | 789.63        | 82.76        | 6.67               | 67.97       | 679.75    | 49.48       | 0.53        | 10.68   |
| 27    | 0.37      | 3.73      | 789.63        | 82.76        | 6.25               | 71.64       | 716.43    | 52.15       | 0.56        | 11.25   |
| 28    | 0.37      | 3.73      | 789.63        | 81.74        | 6.25               | 70.81       | 708.08    | 57.99       | 0.56        | 11.12   |
| 29    | 0.12      | 1.16      | 1404.19       | 85.26        | 6.25               | 97.19       | 971.92    | 53.05       | 0.46        | 9.16    |
| 30    | 0.12      | 1.16      | 1404.19       | 85.26        | 10.00              | 59.36       | 593.60    | 32.40       | 0.28        | 5.59    |
| 31    | 0.12      | 1.16      | 1404.19       | 83.92        | 10.00              | 58.09       | 580.86    | 36.99       | 0.27        | 5.47    |
| 32    | 0.12      | 1.16      | 1404.19       | 85.26        | 9.09               | 62.60       | 625.97    | 34.16       | 0.29        | 5.90    |
| 33    | 0.12      | 1.16      | 1404.19       | 83.92        | 9.09               | 61.39       | 613.89    | 39.09       | 0.29        | 5.79    |

| Noise:        | This is the maximum noise you can allow for the SNR spec. You can have less, of course, but it'll require more C (and probably more current). |  |  |  |
|---------------|---|--|--|--|
| Slew current: | This is calculated assuming a 0.5 V single-ended, linearly settling voltage step at the output.   |  |  |  |
| gm:           | This is a quick estimate based on the required speed and load capacitance.  |  |  |  |
|               | You can see see that for and B = 1 and low gm/id, the bias current for speed can be more stringent than for slew specifications.              |  |  |  |

Notes:

These targets are derived from first order system-level numerical calculations.

So PDK parasitics, non-dominant effects or circuit architecture choices (e.g. B > 1) are not taken into account.

These are very good starting points, but some margin will need to be applied and/or clever circuit design will be needed to get closer to the specifications and overcome the effects that are not taken into account. Also, don't forget about stability!