***Design of Fully Differential Two-stage Opamp***



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| ***Design Specification*** | | | |
| **Parameters** | **Specifications** | | **Pre-sim result** |
| Differential DC Gain | ≥ 63 dB | |  |
| Phase Margin (PM) | ≥ 63° | |  |
| Output Swing  (Gain ≥ 63dB or 1413) | (Vcmo-0.6)≤(Vop or Von)≤(Vcmo+0.6)  0.3V ≤ (Vop or Von) ≤ 1.5V | | **Top:**  **Bottom:** |
| Unity-Gain Bandwidth (UGB) | ≥ 160 MHz | |  |
| Slew Rate (SR) | ≥ 80 V/us | |  |
| Power consumption (.ac) | 600 uW | |  |
|  | | | |
| ***Design Conditions*** | | | |
| **Process Technology** | | CIC 0.18um 1.8V 1P6M virtual Process | |
| **Corner** | | TT | |
| **Temperature** | | 27°C | |
| **Power supply** | | VDD=1.8V & VSS=0V | |
| **Loading (CL)** | | 2pF | |
| **Input common mode voltage (Vcmi)** | | 0.9V | |
| **Output common mode voltage (Vcmo)** | | 0.9V | |

1. ***Design Flow (write your design method)***
2. ***Simulation Results (include AC, DC and Transient)***
3. ***Discussion***