# APPENDIX J

## List of the Ideal DAC's output, DAC6's output and the error

List of the Ideal DAC's output, DAC6's output and the error for

$V_P = 3$ V

$V_N = 0$ V

| Input Code | Ideal DAC Output (V) | DAC6 Output (V) | Error (V) | Input Code | Ideal DAC Output (V) | DAC6 Output (V) | Error (V) |
|---|---|---|---|---|---|---|---|
| 000000 | 0 | 0 | 0 | 100000 | 1.524 | 1.524 | 200.1e-6 |
| 000001 | 47.62e-3 | 46.85e-3 | 7.69e-4 | 100001 | 1.571 | 1.574 | -2.644e-3 |
| 000010 | 95.24e-3 | 93.73e-3 | 1.508e-3 | 100010 | 1.619 | 1.622 | -2.475e-3 |
| 000011 | 142.9e-3 | 140.7e-3 | 2.202e-3 | 100011 | 1.667 | 1.669 | -2.088e-3 |
| 000100 | 190.5e-3 | 187.6e-3 | 2.856e-3 | 100100 | 1.714 | 1.716 | -1.519e-3 |
| 000101 | 238.1e-3 | 234.6e-3 | 3.469e-3 | 100101 | 1.762 | 1.763 | -783.9e-6 |
| 000110 | 285.7e-3 | 281.7e-3 | 4.04e-3 | 100110 | 1.81 | 1.809 | 103.7e-6 |
| 000111 | 333.3e-3 | 328.8e-3 | 4.569e-3 | 100111 | 1.857 | 1.856 | 1.131e-3 |
| 001000 | 381e-3 | 380.9e-3 | 50e-6 | 101000 | 1.905 | 1.905 | 250.2e-6 |
| 001001 | 428.6e-3 | 428.4e-3 | 138.8e-6 | 101001 | 1.952 | 1.955 | -3.06e-3 |
| 001010 | 476.2e-3 | 475.3e-3 | 887.3e-6 | 101010 | 2 | 2.003 | -2.638e-3 |
| 001011 | 523.8e-3 | 522.2e-3 | 1.59e-3 | 101011 | 2.048 | 2.05 | -2.115e-3 |
| 001100 | 571.4e-3 | 569.2e-3 | 2.245e-3 | 101100 | 2.095 | 2.097 | -1.501e-3 |
| 001101 | 619e-3 | 616.2e-3 | 2.852e-3 | 101101 | 2.143 | 2.144 | -802.7e-6 |
| 001110 | 666.7e-3 | 663.3e-3 | 3.409e-3 | 101110 | 2.19 | 2.191 | -30.08e-6 |
| 001111 | 714.3e-3 | 710.4e-3 | 3.915e-3 | 101111 | 2.238 | 2.237 | 809.4e-6 |
| 010000 | 761.9e-3 | 761.8e-3 | 100e-6 | 110000 | 2.286 | 2.285 | 300.2e-6 |
| 010001 | 809.5e-3 | 810e-3 | -468e-6 | 110001 | 2.333 | 2.337 | -3.542e-3 |
| 010010 | 857.1e-3 | 856.8e-3 | 305.4e-6 | 110010 | 2.381 | 2.384 | -2.955e-3 |
| 010011 | 904.8e-3 | 903.7e-3 | 1.022e-3 | 110011 | 2.429 | 2.431 | -2.332e-3 |
| 010100 | 952.4e-3 | 950.7e-3 | 1.681e-3 | 110100 | 2.476 | 2.478 | -1.679e-3 |
| 010101 | 1 | 997.7e-3 | 2.279e-3 | 110101 | 2.524 | 2.525 | -1.003e-3 |
| 010110 | 1.048 | 1.045 | 2.815e-3 | 110110 | 2.571 | 2.572 | -312.6e-6 |
| 010111 | 1.095 | 1.092 | 3.286e-3 | 110111 | 2.619 | 2.619 | 386.3e-6 |
| 011000 | 1.143 | 1.143 | 150.1e-6 | 111000 | 2.667 | 2.666 | 350.2e-6 |
| 011001 | 1.19 | 1.192 | -1.245e-3 | 111001 | 2.714 | 2.718 | -3.984e-3 |
| 011010 | 1.238 | 1.239 | -631.4e-6 | 111010 | 2.762 | 2.765 | -3.229e-3 |
| 011011 | 1.286 | 1.286 | -88.11e-6 | 111011 | 2.81 | 2.812 | -2.498e-3 |
| 011100 | 1.333 | 1.333 | 395.1e-6 | 111100 | 2.857 | 2.859 | -1.8e-3 |
| 011101 | 1.381 | 1.38 | 853.3e-6 | 111101 | 2.905 | 2.906 | -1.145e-3 |
| 011110 | 1.429 | 1.427 | 1.353e-3 | 111110 | 2.952 | 2.953 | -541.1e-6 |
| 011111 | 1.476 | 1.474 | 1.979e-3 | 111111 | 3 | 3 | 0 |