Binomial Transformer Design TABLE 5.1

|           |           | N = 2     | 2         |           | N = 3     |           |           | V         | N = 4     |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Z         | $Z_L/Z_0$ | $Z_1/Z_0$ | $Z_2/Z_0$ | $Z_1/Z_0$ | $Z_2/Z_0$ | $Z_3/Z_0$ | $Z_1/Z_0$ | $Z_2/Z_0$ | $Z_3/Z_0$ | $Z_4/Z_0$ | 02        |
|           | 1.0       | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 00        |
|           | 1.5       | 1.1067    | 1.3554    | 1.0520    | 1.2247    | 1.4259    | 1.0257    | 1.1351    | 1.3215    | 1.4624    | 24        |
|           | 2.0       | 1.1892    | 1.6818    | 1.0907    | 1.4142    | 1.8337    | 1.0444    | 1.2421    | 1.6102    | 1.9150    | 09        |
|           | 3.0       | 1.3161    | 2.2795    | 1.1479    | 1.7321    | 2.6135    | 1.0718    | 1.4105    | 2.1269    | 2.7990    | 00        |
|           | 4.0       | 1.4142    | 2.8285    | 1.1907    | 2.0000    | 3.3594    | 1.0919    | 1.5442    | 2.5903    | 3.6633    | 33        |
|           | 0.9       | 1.5651    | 3.8336    | 1.2544    | 2.4495    | 4.7832    | 1.1215    | 1.7553    | 3.4182    | 5.3500    | 00        |
|           | 8.0       | 1.6818    | 4.7568    | 1.3022    | 2.8284    | 6.1434    | 1.1436    | 1.9232    | 4.1597    | 6.9955    | 55        |
| . ¬       | 0.0       | 1.7783    | 5.6233    | 1.3409    | 3.1623    | 7.4577    | 1.1613    | 2.0651    | 4.8424    | 8.6110    | 0         |
|           |           |           | N = 5     |           |           |           |           | N =       | 9 =       |           |           |
| $Z_L/Z_0$ | $Z_1/Z_0$ | $Z_2/Z_0$ | $Z_3/Z_0$ | $Z_4/Z_0$ | $Z_5/Z_0$ | $Z_1/Z_0$ | $Z_2/Z_0$ | $Z_3/Z_0$ | $Z_4/Z_0$ | $Z_5/Z_0$ | $Z_6/Z_0$ |
| 1.0       | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    |
| 1.5       | 1.0128    | 1.0790    | 1.2247    | 1.3902    | 1.4810    | 1.0064    | 1.0454    | 1.1496    | 1.3048    | 1.4349    | 1.4905    |
| 2.0       | 1.0220    | 1.1391    | 1.4142    | 1.7558    | 1.9569    | 1.0110    | 1.0790    | 1.2693    | 1.5757    | 1.8536    | 1.9782    |
| 3.0       | 1.0354    | 1.2300    | 1.7321    | 2.4390    | 2.8974    | 1.0176    | 1.1288    | 1.4599    | 2.0549    | 2.6577    | 2.9481    |
| 4.0       | 1.0452    | 1.2995    | 2.0000    | 3.0781    | 3.8270    | 1.0225    | 1.1661    | 1.6129    | 2.4800    | 3.4302    | 3.9120    |
| 0.9       | 1.0596    | 1.4055    | 2.4495    | 4.2689    | 5.6625    | 1.0296    | 1.2219    | 1.8573    | 3.2305    | 4.9104    | 5.8275    |
| 8.0       | 1.0703    | 1.4870    | 2.8284    | 5.3800    | 7.4745    | 1.0349    | 1.2640    | 2.0539    | 3.8950    | 6.3291    | 7.7302    |
| 10.0      | 1.0789    | 1.5541    | 3.1623    | 6.4346    | 9.2687    | 1.0392    | 1.2982    | 2.2215    | 4.5015    | 7.7030    | 9.6228    |