|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Various Detected Faults in Analog Multiplier in the presence of faults with deviations (5% – 15%) & (20%-46%)** | | | | | | | |
| **Injected Faults** | **Polynomial Degree** | **=500, = 0.1585** | | **=1000, = 0.1585** | | **=2000, = 0.1585** | |
| **No. of Coefficients Out of Bound** | **Fault Detection Status** | **No. of Coefficients Out of Bound** | **Fault Detection Status** | **No. of Coefficients Out of Bound** | **Fault Detection Status** |
| R11 6% **↑** | **7** | 20 | **√** | 13 | **√** | 11 | **√** |
| R11 6% **↓** | **7** | 3 | **√** | 3 | **√** | 3 | **√** |
| R12 7% **↑** | **7** | 3 | **√** | 3 | **√** | 3 | **√** |
| R12 7% **↓** | **7** | 3 | **√** | 3 | **√** | 3 | **√** |
| R21 8% **↑** | **7** | 9 | **√** | 9 | **√** | 6 | **√** |
| R21 8% **↓** | **7** | 5 | **√** | 4 | **√** | 4 | **√** |
| R22 9% **↑** | **7** | 5 | **√** | 5 | **√** | 5 | **√** |
| R22 9% **↓** | **7** | 5 | **√** | 5 | **√** | 5 | **√** |
| R31 10% **↑** | **7** | 3 | **√** | 3 | **√** | 3 | **√** |
| R31 10% **↓** | **7** | 6 | **√** | 5 | **√** | 5 | **√** |
| R32 11% **↑** | **7** | 23 | **√** | 23 | **√** | 23 | **√** |
| R32 11% **↓** | **7** | 33 | **√** | 33 | **√** | 33 | **√** |
| R41 12% **↑** | **7** | 15 | **√** | 14 | **√** | 13 | **√** |
| R41 12% **↓** | **7** | 22 | **√** | 21 | **√** | 21 | **√** |
| R42 13% ↑ | **7** | 27 | **√** | 27 | **√** | 27 | **√** |
| R42 13% **↓** | **7** | 32 | **√** | 31 | **√** | 31 | **√** |
| R51 14% **↑** | **7** | 18 | **√** | 15 | **√** | 14 | **√** |
| R51 14% **↓** | **7** | 8 | **√** | 7 | **√** | 7 | **√** |
| R52 15% **↑** | **7** | 15 | **√** | 15 | **√** | 13 | **√** |
| R52 15% **↓** | **7** | 25 | **√** | 24 | **√** | 23 | **√** |