



ZIPPY TECHNOLOGY CORP.

# Mean Time Between Failures PREDICTION REPORT

MIL-HDBK-217F, Notice 2

Product : Switching Power Supply

Model/Type : R1U-2650KF(RoHS)(PMBus WP1.2)

|             |                                                                                     |                    |                                                                                      |
|-------------|-------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------|
| Approval By |  | 正式<br>資料<br>用<br>章 |  |
| Prepared By |  |                    |                                                                                      |

ZIPPY TECHNOLOGY CORP.  
6F.,NO.48,WUQUAN RD.,  
WUGU DIST.,NEW TAIPEI CITY,TAIWAN,R.O.C.  
RELIABILITY PREDICTION STANDARD REPORT  
(Sorted by Part Number)  
MIL-HDBK-217F, Notice 2

Date : FEB-04-2021      Time : 11:31:52  
End Item Title : R1U SERIES MTBF  
End Item Part Number : R1U-2650KF(RoHS)(PMBus WP1.2)  
R1U-2650KF(RoHS)(PMBus WP1.2) MTBF : 192,110  
Module Title : ZIPPY TECHNOLOGY CORP  
Module Part Number : R1U / MTBF  
Module Reference Designation : R1U  
Environmental Condition : GB  
Ambient Temperature: 25°C

**R1U-2650KF(RoHS)(PMBus WP1.2)**

| ITEM<br># | Part<br>Number | Ref<br>Desig | Qual<br>Level | Quant | Individual<br>Failure Rate<br>(F/10 <sup>6</sup> Hrs) | Total<br>Failure Rate<br>(F/10 <sup>6</sup> Hrs) |
|-----------|----------------|--------------|---------------|-------|-------------------------------------------------------|--------------------------------------------------|
| 1         | B106080002     | BOM          | SPECIAL       | 1     | 0.111570                                              | 0.111570                                         |
| 2         | B106080003     | BOM          | SPECIAL       | 1     | 0.290440                                              | 0.290440                                         |
| 3         | B106660003     | BOM          | SPECIAL       | 1     | 0.838507                                              | 0.838507                                         |
| 4         | B106660004     | BOM          | SPECIAL       | 1     | 0.199806                                              | 0.199806                                         |
| 5         | B200000296     | BOM          | NMIL          | 1     | 0.005248                                              | 0.005248                                         |
| 6         | B200000308     | BOM          | NMIL          | 2     | 0.013289                                              | 0.026578                                         |
| 7         | B200000559     | BOM          | NMIL          | 1     | 0.005483                                              | 0.005483                                         |
| 8         | B200010056     | BOM          | NMIL          | 3     | 0.000600                                              | 0.001800                                         |
| 9         | B200010068     | BOM          | NMIL          | 1     | 0.069762                                              | 0.069762                                         |
| 10        | B200010259     | BOM          | NMIL          | 2     | 0.073390                                              | 0.146780                                         |
| 11        | B200010266     | BOM          | NMIL          | 1     | 0.075893                                              | 0.075893                                         |
| 12        | B200010270     | BOM          | NMIL          | 4     | 0.000652                                              | 0.002608                                         |
| 13        | B200010283     | BOM          | NMIL          | 6     | 0.072168                                              | 0.433008                                         |
| 14        | B200020024     | BOM          | NMIL          | 1     | 0.000414                                              | 0.000414                                         |
| 15        | B200020046     | BOM          | NMIL          | 1     | 0.000755                                              | 0.000755                                         |
| 16        | B200030069     | BOM          | NMIL          | 1     | 0.001906                                              | 0.001906                                         |
| 17        | B200030083     | BOM          | NMIL          | 1     | 0.000712                                              | 0.000712                                         |
| 18        | B200040073     | BOM          | NMIL          | 12    | 0.011646                                              | 0.139752                                         |
| 19        | B200040120     | BOM          | NMIL          | 1     | 0.014427                                              | 0.014427                                         |
| 20        | B200040133     | BOM          | NMIL          | 2     | 0.008485                                              | 0.016970                                         |
| 21        | B200040150     | BOM          | NMIL          | 1     | 0.011646                                              | 0.011646                                         |
| 22        | B200040173     | BOM          | NMIL          | 1     | 0.003751                                              | 0.003751                                         |
| 23        | B200050081     | BOM          | NMIL          | 5     | 0.003013                                              | 0.015065                                         |
| 24        | B200050084     | BOM          | NMIL          | 1     | 0.003013                                              | 0.003013                                         |

ZIPPY TECHNOLOGY CORP.  
6F.,NO.48,WUQUAN RD.,  
WUGU DIST.,NEW TAIPEI CITY,TAIWAN,R.O.C.

| ITEM<br># | Part<br>Number | Ref<br>Desig | Qual<br>Level | Quant | Individual<br>Failure Rate<br>(F/10 <sup>6</sup> Hrs) | Total<br>Failure Rate<br>(F/10 <sup>6</sup> Hrs) |
|-----------|----------------|--------------|---------------|-------|-------------------------------------------------------|--------------------------------------------------|
| 25        | B200050088     | BOM          | NMIL          | 1     | 0.003013                                              | 0.003013                                         |
| 26        | B200060029     | BOM          | NMIL          | 1     | 0.002662                                              | 0.002662                                         |
| 27        | B200090055     | BOM          | NMIL          | 1     | 0.001476                                              | 0.001476                                         |
| 28        | B200110001     | BOM          | NMIL          | 1     | 0.002896                                              | 0.002896                                         |
| 29        | B200110035     | BOM          | NMIL          | 1     | 0.002896                                              | 0.002896                                         |
| 30        | B200110046     | BOM          | NMIL          | 1     | 0.002896                                              | 0.002896                                         |
| 31        | B200110128     | BOM          | NMIL          | 1     | 0.001551                                              | 0.001551                                         |
| 32        | B200110162     | BOM          | NMIL          | 1     | 0.002896                                              | 0.002896                                         |
| 33        | B200110177     | BOM          | NMIL          | 2     | 0.002896                                              | 0.005792                                         |
| 34        | B200110192     | BOM          | NMIL          | 1     | 0.002210                                              | 0.002210                                         |
| 35        | B200110279     | BOM          | NMIL          | 1     | 0.002210                                              | 0.002210                                         |
| 36        | B200110282     | BOM          | NMIL          | 1     | 0.002896                                              | 0.002896                                         |
| 37        | B200110337     | BOM          | NMIL          | 2     | 0.003039                                              | 0.006078                                         |
| 38        | B200110473     | BOM          | NMIL          | 3     | 0.002896                                              | 0.008688                                         |
| 39        | B200110498     | BOM          | NMIL          | 2     | 0.002210                                              | 0.004420                                         |
| 40        | B200110523     | BOM          | NMIL          | 1     | 0.002210                                              | 0.002210                                         |
| 41        | B200110530     | BOM          | NMIL          | 1     | 0.002210                                              | 0.002210                                         |
| 42        | B200110608     | BOM          | NMIL          | 3     | 0.002835                                              | 0.008505                                         |
| 43        | B200110709     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 44        | B200110715     | BOM          | NMIL          | 2     | 0.002896                                              | 0.005792                                         |
| 45        | B200110733     | BOM          | NMIL          | 10    | 0.002026                                              | 0.020260                                         |
| 46        | B200110734     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 47        | B200110738     | BOM          | NMIL          | 5     | 0.002026                                              | 0.010130                                         |
| 48        | B200110739     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 49        | B200110771     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 50        | B200110775     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 51        | B200110777     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 52        | B200110797     | BOM          | NMIL          | 1     | 0.002126                                              | 0.002126                                         |
| 53        | B200110808     | BOM          | NMIL          | 7     | 0.002026                                              | 0.014182                                         |
| 54        | B200110811     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 55        | B200110814     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 56        | B200110819     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 57        | B200110851     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 58        | B200110870     | BOM          | NMIL          | 1     | 0.002126                                              | 0.002126                                         |
| 59        | B200110872     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 60        | B200110891     | BOM          | NMIL          | 1     | 0.002126                                              | 0.002126                                         |
| 61        | B200110928     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 62        | B200111016     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 63        | B200111024     | BOM          | NMIL          | 1     | 0.002026                                              | 0.002026                                         |
| 64        | B200120170     | BOM          | NMIL          | 1     | 0.005001                                              | 0.005001                                         |

ZIPPY TECHNOLOGY CORP.  
6F.,NO.48,WUQUAN RD.,  
WUGU DIST.,NEW TAIPEI CITY,TAIWAN,R.O.C.

| ITEM<br># | Part<br>Number | Ref<br>Desig | Qual<br>Level | Quant | Individual<br>Failure Rate<br>(F/10 <sup>6</sup> Hrs) | Total<br>Failure Rate<br>(F/10 <sup>6</sup> Hrs) |
|-----------|----------------|--------------|---------------|-------|-------------------------------------------------------|--------------------------------------------------|
| 65        | B200160009     | BOM          | NMIL          | 1     | 0.008611                                              | 0.008611                                         |
| 66        | B200160017     | BOM          | NMIL          | 1     | 0.004760                                              | 0.004760                                         |
| 67        | B200170055     | BOM          | NMIL          | 1     | 0.003721                                              | 0.003721                                         |
| 68        | B200170070     | BOM          | NMIL          | 1     | 0.003177                                              | 0.003177                                         |
| 69        | B200170071     | BOM          | NMIL          | 2     | 0.003177                                              | 0.006354                                         |
| 70        | B200170074     | BOM          | NMIL          | 2     | 0.002840                                              | 0.005680                                         |
| 71        | B200180095     | BOM          | NMIL          | 1     | 0.001907                                              | 0.001907                                         |
| 72        | B200180108     | BOM          | NMIL          | 1     | 0.001974                                              | 0.001974                                         |
| 73        | B200190064     | BOM          | NMIL          | 1     | 0.012538                                              | 0.012538                                         |
| 74        | B200190072     | BOM          | NMIL          | 1     | 0.010940                                              | 0.010940                                         |
| 75        | B200200075     | BOM          | NMIL          | 1     | 0.009676                                              | 0.009676                                         |
| 76        | B200200116     | BOM          | NMIL          | 4     | 0.004199                                              | 0.016796                                         |
| 77        | B200200140     | BOM          | NMIL          | 1     | 0.003664                                              | 0.003664                                         |
| 78        | B200200142     | BOM          | NMIL          | 1     | 0.007306                                              | 0.007306                                         |
| 79        | B200200158     | BOM          | NMIL          | 1     | 0.004508                                              | 0.004508                                         |
| 80        | B200200193     | BOM          | NMIL          | 1     | 0.004827                                              | 0.004827                                         |
| 81        | B200200197     | BOM          | NMIL          | 1     | 0.005939                                              | 0.005939                                         |
| 82        | B200200207     | BOM          | NMIL          | 1     | 0.005166                                              | 0.005166                                         |
| 83        | B200200208     | BOM          | NMIL          | 3     | 0.006356                                              | 0.019068                                         |
| 84        | B200200213     | BOM          | NMIL          | 1     | 0.003924                                              | 0.003924                                         |
| 85        | B200220020     | BOM          | NMIL          | 1     | 0.003440                                              | 0.003440                                         |
| 86        | B200220082     | BOM          | NMIL          | 3     | 0.001208                                              | 0.003624                                         |
| 87        | B200220087     | BOM          | NMIL          | 2     | 0.001125                                              | 0.002250                                         |
| 88        | B200230210     | BOM          | NMIL          | 1     | 0.009001                                              | 0.009001                                         |
| 89        | B200230263     | BOM          | NMIL          | 3     | 0.001263                                              | 0.003789                                         |
| 90        | B200230281     | BOM          | NMIL          | 1     | 0.006574                                              | 0.006574                                         |
| 91        | B200230288     | BOM          | NMIL          | 1     | 0.001165                                              | 0.001165                                         |
| 92        | B200230381     | BOM          | NMIL          | 1     | 0.008569                                              | 0.008569                                         |
| 93        | B200230417     | BOM          | NMIL          | 1     | 0.001661                                              | 0.001661                                         |
| 94        | B200230436     | BOM          | NMIL          | 2     | 0.001803                                              | 0.003606                                         |
| 95        | B200230465     | BOM          | NMIL          | 1     | 0.021269                                              | 0.021269                                         |
| 96        | B200230537     | BOM          | NMIL          | 3     | 0.016249                                              | 0.048747                                         |
| 97        | B200240012     | BOM          | NMIL          | 1     | 0.005171                                              | 0.005171                                         |
| 98        | B200250009     | BOM          | NMIL          | 1     | 0.000205                                              | 0.000205                                         |
| 99        | B200260382     | BOM          | NMIL          | 1     | 0.000258                                              | 0.000258                                         |
| 100       | B200260413     | BOM          | NMIL          | 1     | 0.000192                                              | 0.000192                                         |
| 101       | B200260475     | BOM          | NMIL          | 1     | 0.000251                                              | 0.000251                                         |
| 102       | B200280012     | BOM          | NMIL          | 1     | 0.000623                                              | 0.000623                                         |
| 103       | B200290015     | BOM          | NMIL          | 2     | 0.011159                                              | 0.022318                                         |
| 104       | B200300476     | BOM          | NMIL          | 1     | 0.007896                                              | 0.007896                                         |

ZIPPY TECHNOLOGY CORP.  
6F.,NO.48,WUQUAN RD.,  
WUGU DIST.,NEW TAIPEI CITY,TAIWAN,R.O.C.

| ITEM<br># | Part<br>Number | Ref<br>Desig | Qual<br>Level | Quant | Individual<br>Failure Rate<br>(F/10 <sup>6</sup> Hrs) | Total<br>Failure Rate<br>(F/10 <sup>6</sup> Hrs) |
|-----------|----------------|--------------|---------------|-------|-------------------------------------------------------|--------------------------------------------------|
| 105       | B200300540     | BOM          | NMIL          | 1     | 0.094536                                              | 0.094536                                         |
| 106       | B200310019     | BOM          | NMIL          | 1     | 0.005232                                              | 0.005232                                         |
| 107       | B200370095     | BOM          | NMIL          | 1     | 0.001671                                              | 0.001671                                         |
| 108       | B210060136     | BOM          | NMIL          | 1     | 0.024396                                              | 0.024396                                         |
| 109       | B210090232     | BOM          | SPECIAL       | 1     | 2.182912                                              | 2.182912                                         |
| 110       | B210160060     | BOM          | NMIL          | 1     | 0.010000                                              | 0.010000                                         |
| 111       | B210193339     | BOM          | NMIL          | 1     | 0.023940                                              | 0.023940                                         |

|                                                |          |
|------------------------------------------------|----------|
| Total Failure Rate (F/10 <sup>6</sup> Hrs) :   | 5.205338 |
| Mean Time (in hours) Between Failures (MTBF) : | 192,110  |