

TABLE 1. Experiment matrix selection for RoHS conversion, Phase 1.

| EXP # | PASTE TYPE | SURFACE FINISH | TAL (sec) | REFLOW PROFILE | NITROGEN |
|-------|------------|----------------|-----------|----------------|----------|
| 1 | Sn/Ag/Cu | OSP | 60 | Yes | Yes |
| 2 | Sn/Ag/Cu | OSP | 90 | No | No |
| 3 | Sn/Ag/Cu | OSP | 120 | No | Yes |
| 4 | Sn/Ag/Cu | ENIG | 60 | No | No |
| 5 | Sn/Ag/Cu | ENIG | 90 | No | Yes |
| 6 | Sn/Ag/Cu | ENIG | 120 | Yes | Yes |
| 7 | Sn/Ag/Cu | OSP | 60 | No | Yes |
| 8 | Sn/Ag/Cu | OSP | 90 | Yes | Yes |
| 9 | Sn/Ag/Cu | OSP | 120 | No | No |
| 10 | Sn/Bi | OSP | 60 | No | Yes |
| 11 | Sn/Bi | OSP | 90 | No | Yes |
| 12 | Sn/Bi | OSP | 120 | Yes | No |
| 13 | Sn/Bi | ENIG | 60 | No | Yes |
| 14 | Sn/Bi | ENIG | 90 | Yes | No |
| 15 | Sn/Bi | ENIG | 120 | No | Yes |
| 16 | Sn/Bi | OSP | 60 | Yes | No |
| 17 | Sn/Bi | OSP | 90 | No | Yes |
| 18 | Sn/Bi | OSP | 120 | No | Yes |
| 19 | Sn/Ag | OSP | 60 | No | No |
| 20 | Sn/Ag | OSP | 90 | Yes | Yes |
| 21 | Sn/Ag | OSP | 120 | No | Yes |
| 22 | Sn/Ag | ENIG | 60 | Yes | Yes |
| 23 | Sn/Ag | ENIG | 90 | No | Yes |
| 24 | Sn/Ag | ENIG | 120 | No | No |
| 25 | Sn/Ag | OSP | 60 | No | Yes |
| 26 | Sn/Ag | OSP | 90 | No | No |
| 27 | Sn/Ag | OSP | 120 | Yes | Yes |