

# 石巻工場 技術ロードマップ

## プリプレグベーステクノロジー (MSAP・サブトラ工法)

| 項目                            |             | FY2025                              |                     | FY2026                        |                     | FY2027                        |                     |
|-------------------------------|-------------|-------------------------------------|---------------------|-------------------------------|---------------------|-------------------------------|---------------------|
|                               |             | HVM                                 | Proto Type          | HVM                           | Proto Type          | HVM                           | Proto Type          |
| L/S                           | Subtractive | 40/40                               | 35/35               | 40/40                         | 35/35               | 40/40                         | 35/35               |
|                               | MSAP        | 30/30                               | 25/25               | 25/25                         | 20/20               | 25/25                         | 20/20               |
| Thickness (Core)              |             | 60                                  | 50                  | 60                            | 50                  | 60                            | 50                  |
| Thickness (Prepreg)           |             | 30 (#1027)                          | 25 (#1017)          | 25 (#1017)                    | 20 (#1010)          | 25 (#1017)                    | 20 (#1010)          |
| LVH/Land Dia. (Laser)         |             | Φ75/Φ150 (PP<40)                    | Φ60/Φ125 (PP<30)    | Φ75/Φ150 (PP<40)              | Φ60/Φ125 (PP<30)    | Φ75/Φ150 (PP<40)              | Φ60/Φ125 (PP<30)    |
| BVH/Land Dia. (Drill)         |             | Φ150/Φ250                           | Φ125/Φ225           | Φ125/Φ225                     | Φ105/Φ200           | Φ125/Φ225                     | Φ150/Φ250           |
| TH/Land Dia. (Drill)          |             | Φ200/Φ450                           | Φ200/Φ400 (APR<6.4) | Φ200/Φ450                     | Φ200/Φ400 (APR<6.4) | Φ200/Φ450                     | Φ200/Φ400 (APR<6.4) |
| Layer                         |             | 2~12L<br>(MLB, HDI, AnyLayer)       | 14L<br>(MLB, HDI)   | 2~12L<br>(MLB, HDI, AnyLayer) | 14L (MLB, HDI)      | 2~12L<br>(MLB, HDI, AnyLayer) | 14L (MLB, HDI)      |
| Surface Treatment (OutSource) |             | OSP、電解Ni/Au、無電解Ni/厚付けAu、無電解Ni/Pd/Au |                     |                               |                     |                               |                     |

## ABFベーステクノロジー (SAP工法)

| 項目                       |                        |        | FY2025                                    |                                 | FY2026                                                                       |            | FY2027                                                                       |            |
|--------------------------|------------------------|--------|-------------------------------------------|---------------------------------|------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------|------------|
|                          |                        |        | HVM                                       | Proto Type                      | HVM                                                                          | Proto Type | HVM                                                                          | Proto Type |
| Max Build-up Layer Count |                        |        | 9                                         | 10                              | 10                                                                           | 12         | 12                                                                           | 12         |
| Max Via Stack            |                        |        | 6                                         | 10                              | 10                                                                           | 12         | 12                                                                           | 12         |
| Trace                    | BU L/S (SAP)           |        | 8/8                                       | 7/7                             | 7/7                                                                          | 6/6        | 6/6                                                                          | 5/5        |
|                          | BU Trace Thickness     |        | 12                                        | 10                              | 10                                                                           | 8          | 8                                                                            | 6          |
|                          | Core L/S (Subtractive) |        | 45/45                                     | 45/45                           | 45/45                                                                        | 40/40      | 40/40                                                                        | 35/35      |
| Via/Land                 | BU                     | Via    | Φ50                                       | Φ50                             | Φ50                                                                          | Φ45        | Φ45                                                                          | Φ40        |
|                          |                        | Land   | Φ80                                       | Φ75                             | Φ75                                                                          | Φ70        | Φ70                                                                          | Φ70        |
| TH/Land Dia. (Drill)     | Core Thickness         | 0.4mm  | Φ105/Φ200                                 | Φ105/Φ200                       | Φ105/Φ200                                                                    | Φ105/Φ200  | Φ105/Φ200                                                                    | Φ105/Φ200  |
|                          |                        | 0.8mm  | Φ105/Φ200                                 | Φ105/Φ200                       | Φ105/Φ200                                                                    | Φ105/Φ200  | Φ105/Φ200                                                                    | Φ105/Φ200  |
|                          |                        | 1.2mm  | Φ150/Φ250                                 | Φ150/Φ250                       | Φ150/Φ250                                                                    | Φ150/Φ250  | Φ150/Φ250                                                                    | Φ150/Φ250  |
|                          |                        | 1.4mm  | Φ200/Φ300                                 | Φ200/Φ300                       | Φ200/Φ300                                                                    | Φ200/Φ300  | Φ200/Φ300                                                                    | Φ200/Φ300  |
| SR                       | Opening (μm)           |        | Φ65                                       | Φ60                             | Φ60                                                                          | Φ55        | Φ55                                                                          | Φ50        |
|                          | Cu Pad (μm)            |        | Φ90                                       | Φ85                             | Φ85                                                                          | Φ80        | Φ80                                                                          | Φ75        |
| SOP                      | Min Bump Pitch (μm)    |        | 120                                       | 110                             | 110                                                                          | 100        | 100                                                                          | 90         |
| Material                 | Core                   |        | E-700G (R)<br>E-705G<br>E-795G<br>R-1515V | HL832RS (LCA)<br>HL832NSA (TLC) | E-700G (R)<br>E-705G<br>E-795G<br>R-1515V<br>HL832RS (LCA)<br>HL832NSA (TLC) | TBD        | E-700G (R)<br>E-705G<br>E-795G<br>R-1515V<br>HL832RS (LCA)<br>HL832NSA (TLC) | TBD        |
|                          | BU Film                |        | GX92<br>GXT31<br>GL102F                   | GL107<br>NX04H<br>NQ07XP        | GX92<br>GXT31<br>GL102F<br>GL107<br>NX04H<br>NQ07XP                          | TBD        | GX92<br>GXT31<br>GL102F<br>GL107<br>NX04H<br>NQ07XP                          | TBD        |
|                          | SR                     | Liquid | SR7300G<br>SR7400A                        | TBD                             | SR7300G<br>SR7400A                                                           | TBD        | SR7300G<br>SR7400A                                                           | TBD        |
|                          |                        | Film   | —                                         | SR-FK<br>SR1                    | SR-FK<br>SR1                                                                 | TBD        | SR-FK<br>SR1                                                                 | TBD        |