



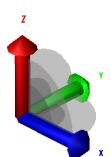
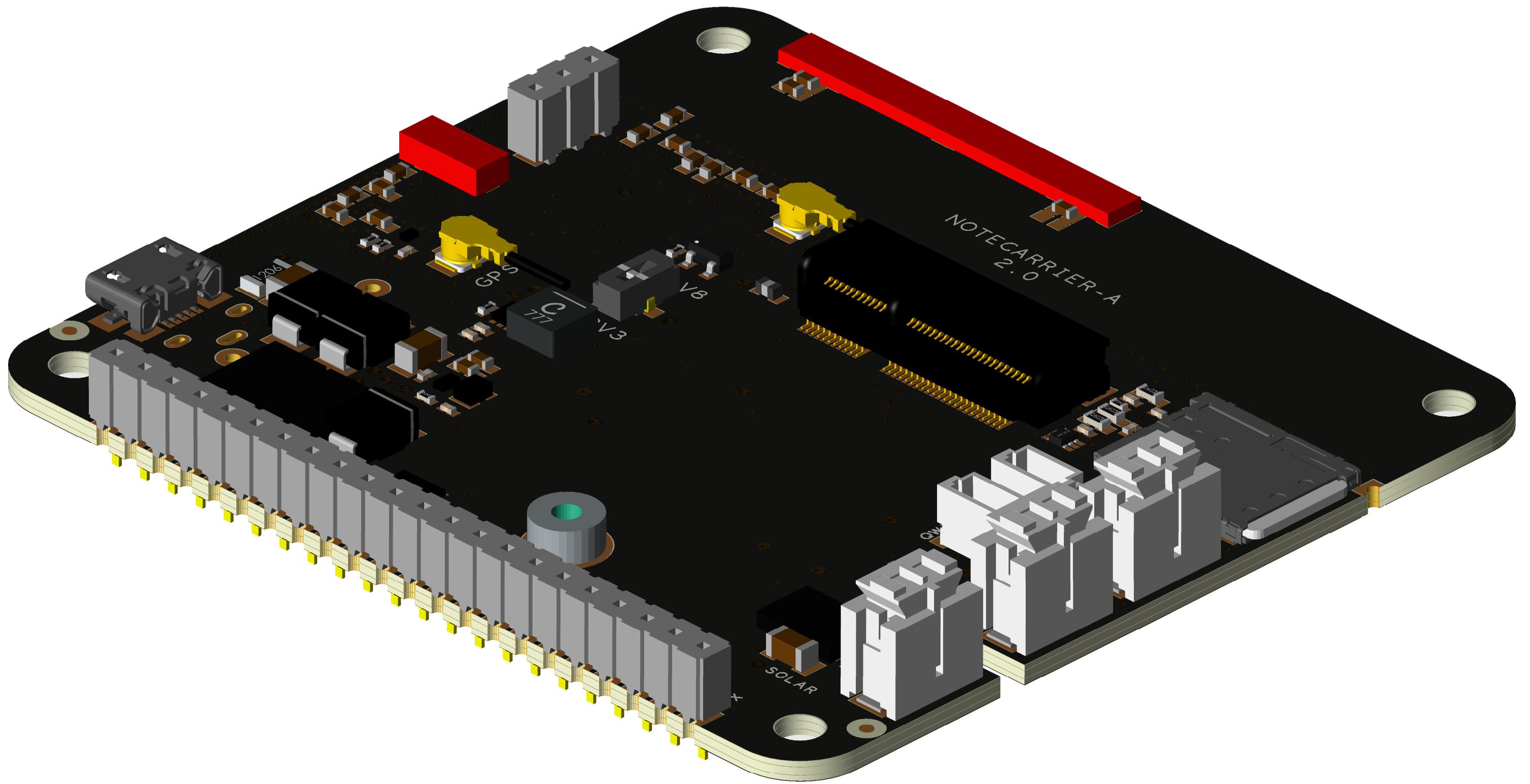
## PCB DOCUMENTATION

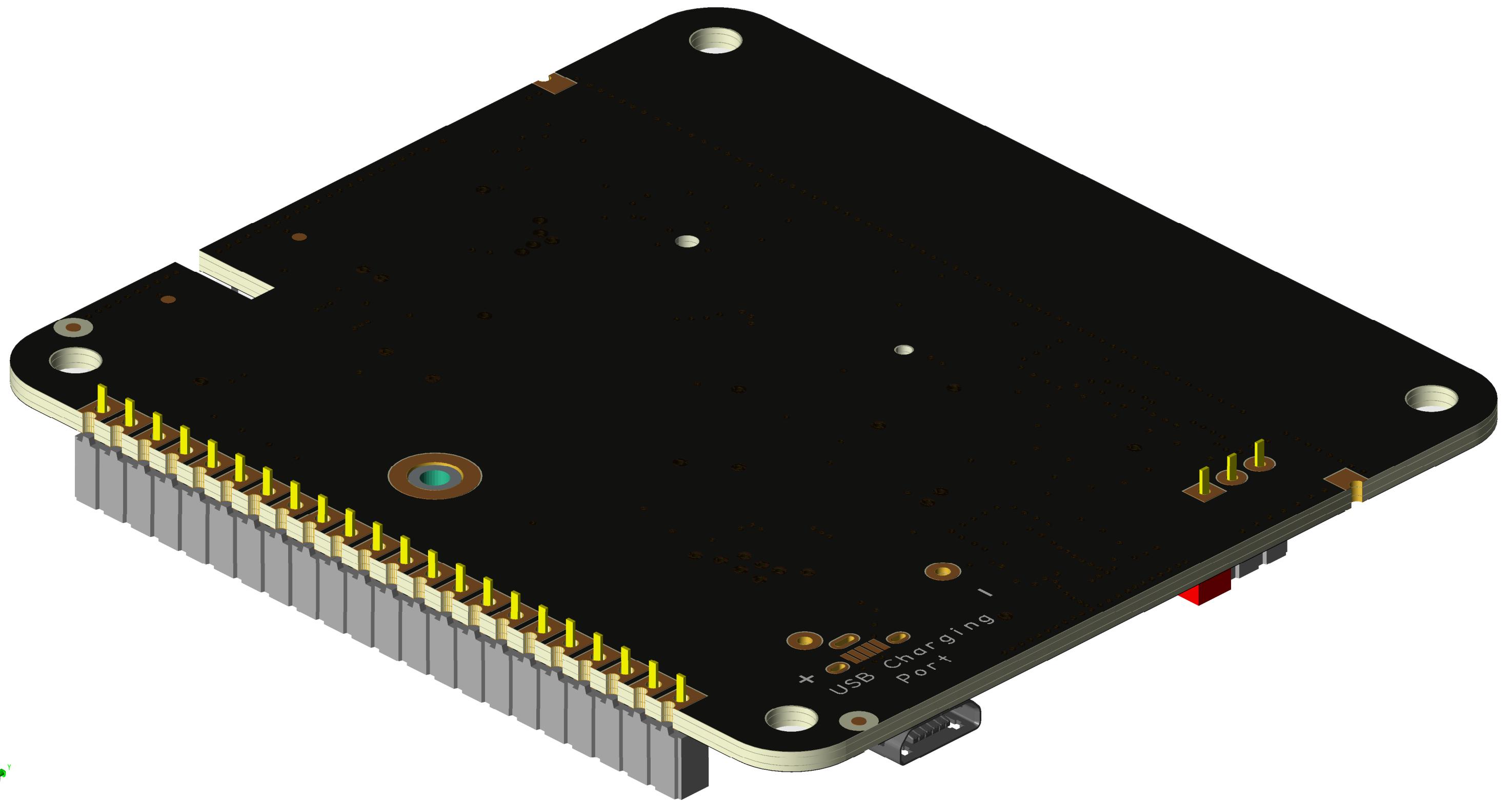
CUSTOMER: BLUES

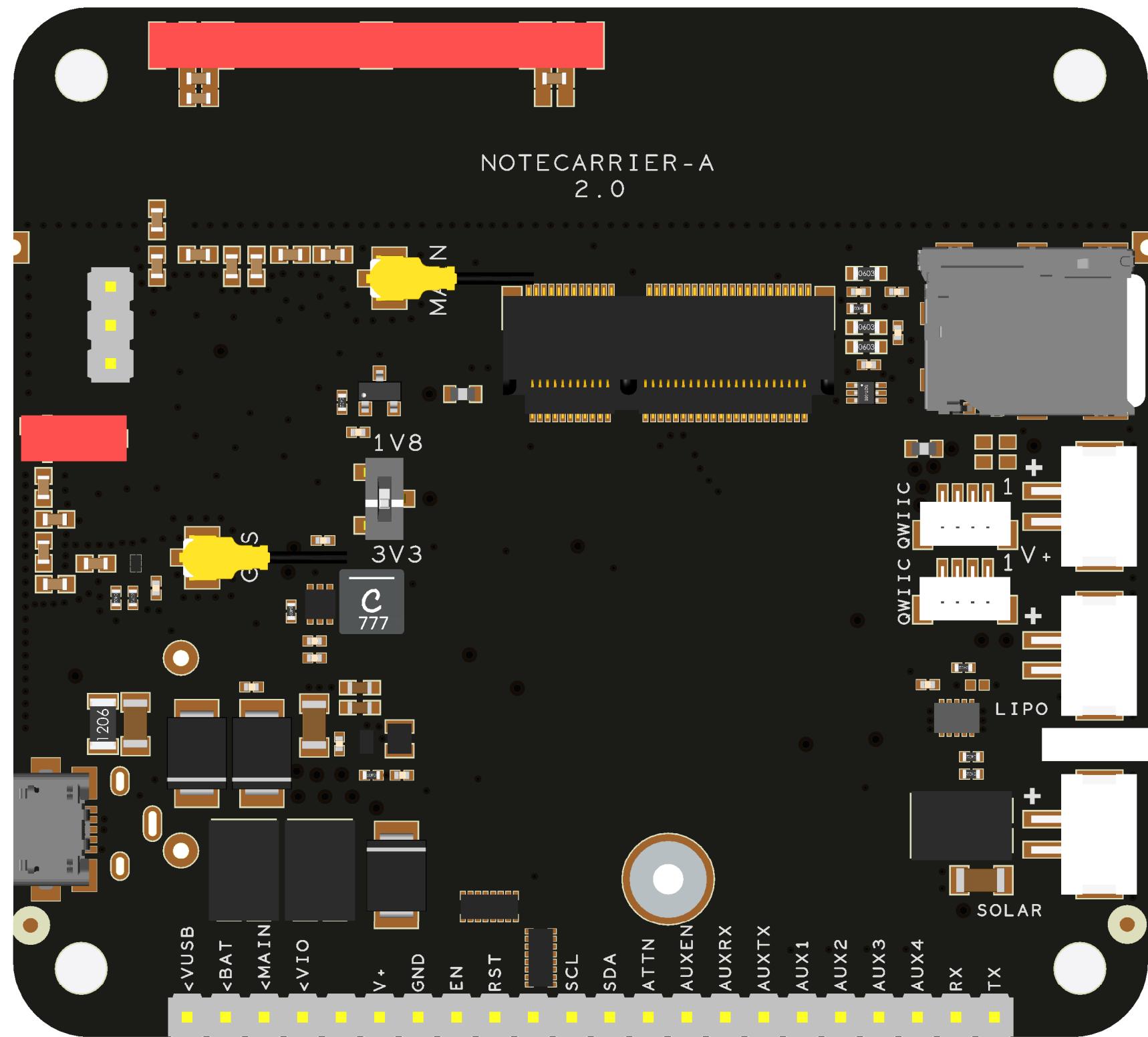
PROJECT: NOTECARRIER-M2-AL\_V16

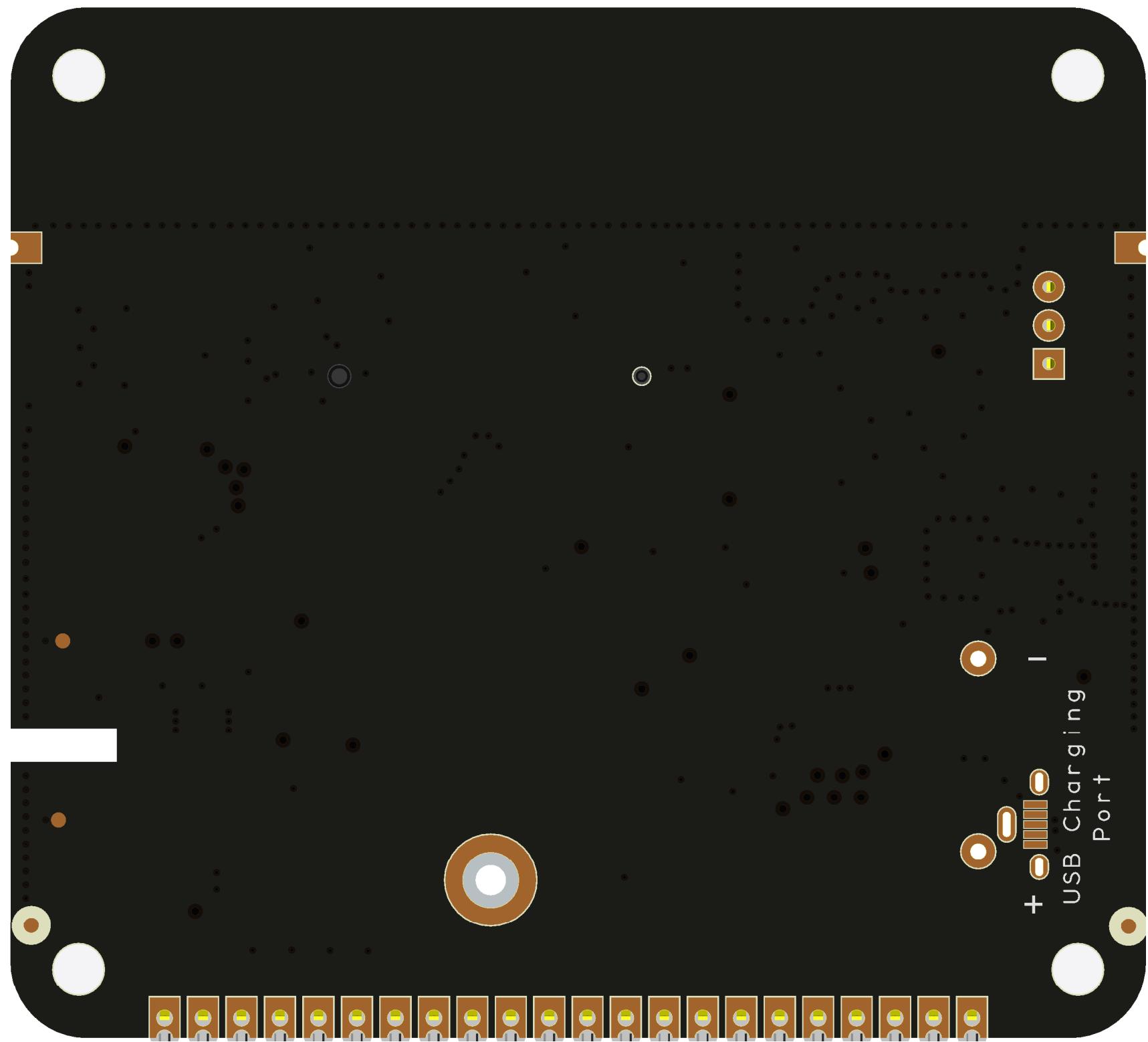
FAE CODE: 2021-0324

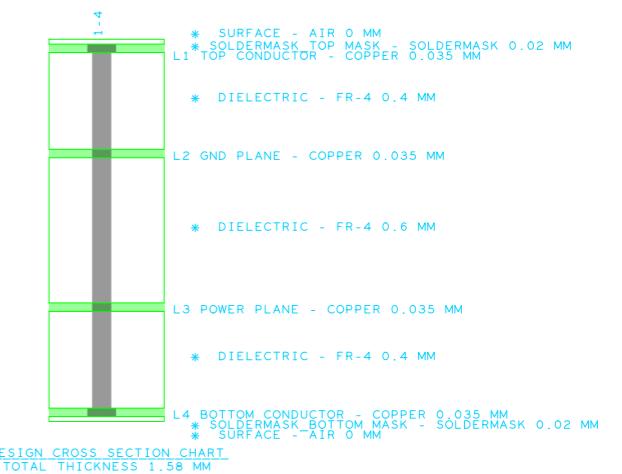
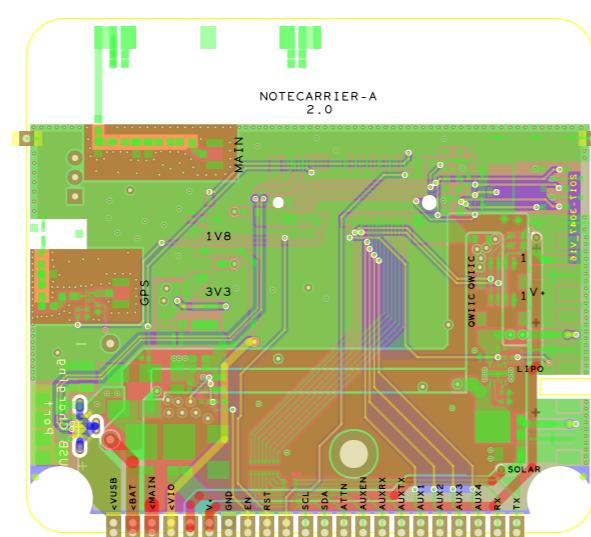
DATE: 30/11/2021











TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

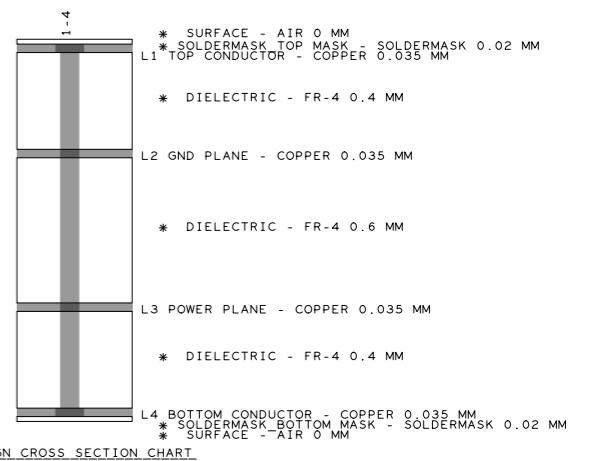
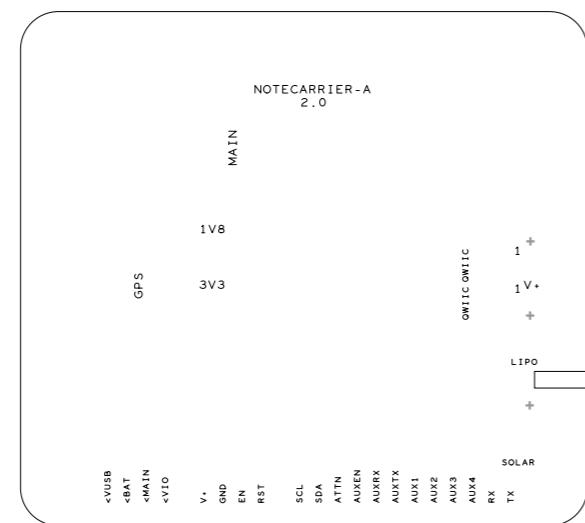
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
|--------|------------|--------------|------------------------|------------------------|-----------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |

#### MANUFACTURING SPECIFICATIONS

|                         |                          |                              |         |
|-------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)      | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO. OF LAYERS           | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE     | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE      | 35um                     | BLIND VIA                    | NO      |
| FINISH                  | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR            | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR        | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL     | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL       | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                     | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|  |   |              |            |
|--|---|--------------|------------|
| <b>Blues Inc</b><br><br>Project name<br>NOTEBOOK<br><br>Designed by FAE Technology SpA - Gazzaniga (BG) - Italy<br>Project Code 2017-3047<br><br>Internal Code -<br>Rev. 16 Size Page A3 Scale 1:1 Data 01/10/2021 | Project name  |              | Board name |
|  | NOTEBOOK  |              | NOTEBOOK-A |
|  | Designed by FAE Technology SpA - Gazzaniga (BG) - Italy |              |            |
|  | Project Code 2017-3047                                  |              |            |
|  | Internal Code -   |              | Code -     |
|  | Rev. 16   | Size Page A3 | Scale 1:1  |
| Data 01/10/2021  |   |              |            |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

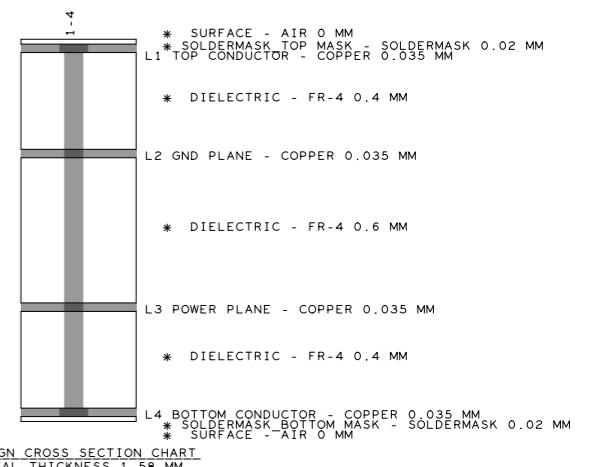
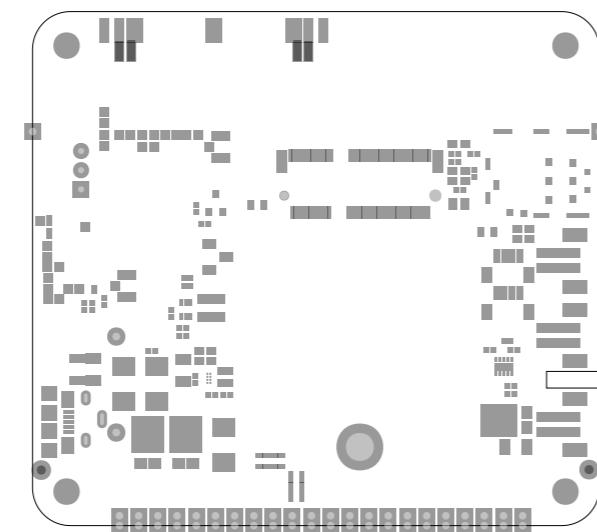
IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
|--------|------------|--------------|------------------------|------------------------|-----------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |

MANUFACTURING SPECIFICATIONS

|                         |                          |                              |         |
|-------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)      | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO. OF LAYERS           | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE     | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE      | 35um                     | BLIND VIA                    | NO      |
| FINISH                  | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR            | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR        | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL     | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL       | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                     | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|                    |   |           |                 |
|--------------------|---|-----------|-----------------|
| <h1>Blues Inc</h1> | Project name  |           | Board name      |
|                    | NOTEBOOK  |           | NOTEBOOK-M2-AL  |
|                    | Designed by FAE Technology SpA - Gazzaniga (BG) - Italy |           |                 |
|                    | Project Code 2017-3047                                  |           |                 |
|                    | Internal Code -   |           | Code -          |
|                    | Rev.  | Size Page | Scale           |
|                    | 16  | A3        | 1:1             |
|                    |   |           | Data 01/10/2021 |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

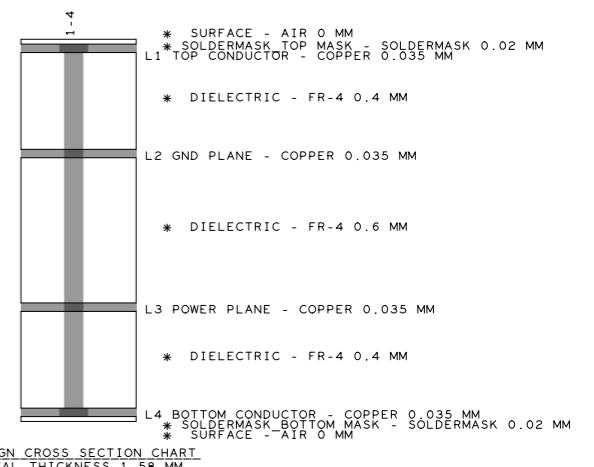
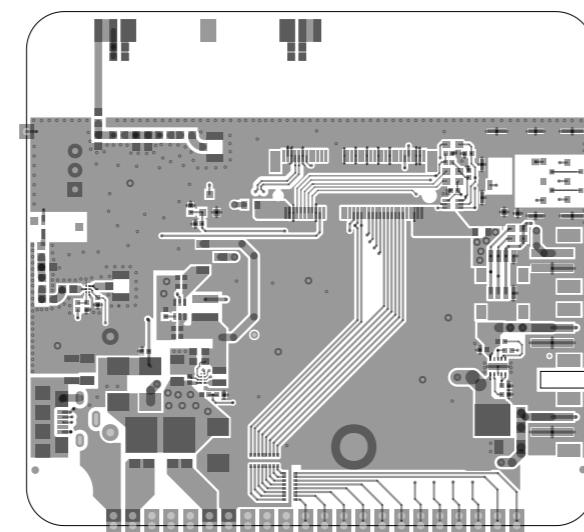
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
|--------|------------|--------------|------------------------|------------------------|-----------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |

#### MANUFACTURING SPECIFICATIONS

|                         |                          |                              |         |
|-------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)      | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO.OF LAYERS            | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE     | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE      | 35um                     | BLIND VIA                    | NO      |
| FINISH                  | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR            | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR        | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL     | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL       | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                     | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|           |               |   |                   |            |
|-----------|---------------|---|-------------------|------------|
| Blues Inc | Project name  |   | Board name        |            |
|           | NOTEBOOK      |   | NOTECARRIER-M2-AL |            |
|           | Designed by   | FAE Technology SpA - Gazzaniga (BG) - Italy |                   |            |
|           | Project Code  | 2017-3047                                   |                   |            |
|           | Internal Code | -   | Code              | -          |
|           | Rev.          | Size Page                                   | Scale             | Data       |
|           | 16            | A3  | 1:1               | 01/10/2021 |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

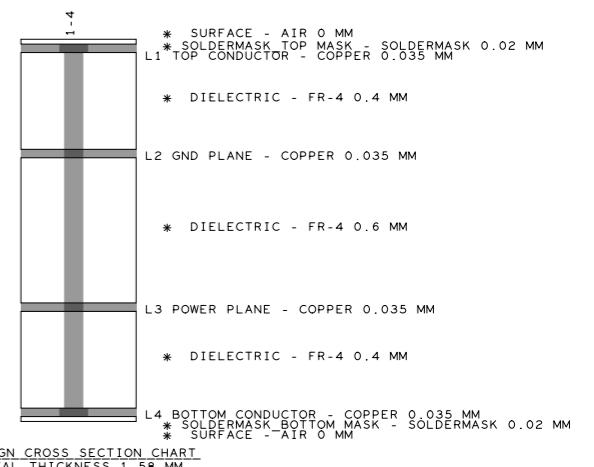
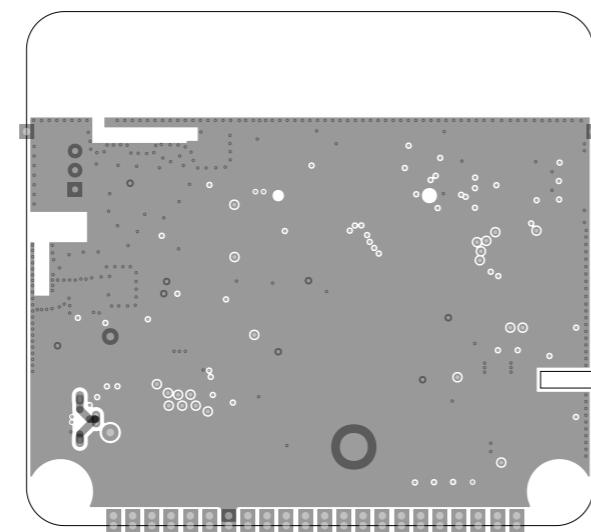
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
|--------|------------|--------------|------------------------|------------------------|-----------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |

#### MANUFACTURING SPECIFICATIONS

|                         |                         |                              |         |
|-------------------------|-------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)      | 75x68x1.6mm             | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLERANCE (X Y Z) | +-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO.OF LAYERS            | 4                       | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE     | 17um                    | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE      | 35um                    | BLIND VIA                    | NO      |
| FINISH                  | ENIG                    | BURIED VIA                   | NO      |
| SOLDER COLOR            | BLACK                   | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR        | WHITE                   | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL     | FR4-TG150               | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL       | YES                     | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                     | 175V                    | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|  |   |           |                   |
|--|---|-----------|-------------------|
| <b>Blues Inc</b><br><br>Copyright (c) 2020 Blues Inc | Project name  |           | Board name        |
|  | NOTEBOOK  |           | NOTECARRIER-M2-AL |
|  | Designed by FAE Technology SpA - Gazzaniga (BG) - Italy |           |                   |
|  | Project Code 2017-3047                                  |           |                   |
|  | Internal Code -   |           | Code -            |
|  | Rev.  | Size Page | Scale             |
|  | 16  | A3        | 1:1               |
|  |   |           | Data 01/10/2021   |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

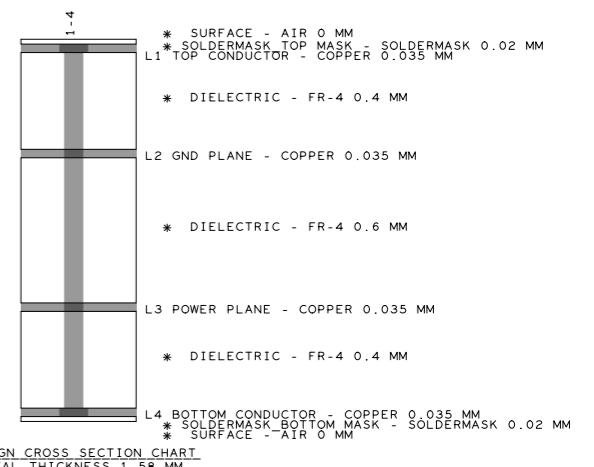
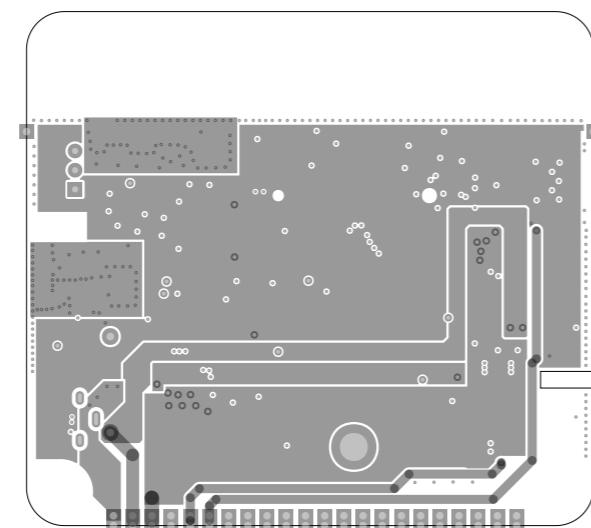
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
|--------|------------|--------------|------------------------|------------------------|-----------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |

#### MANUFACTURING SPECIFICATIONS

|                         |                          |                              |         |
|-------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)      | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO.OF LAYERS            | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE     | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE      | 35um                     | BLIND VIA                    | NO      |
| FINISH                  | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR            | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR        | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL     | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL       | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                     | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|           |               |   |                   |            |
|-----------|---------------|---|-------------------|------------|
| Blues Inc | Project name  |   | Board name        |            |
|           | NOTEBOOK      |   | NOTECARRIER-M2-AL |            |
|           | Designed by   | FAE Technology SpA - Gazzaniga (BG) - Italy |                   |            |
|           | Project Code  | 2017-3047                                   |                   |            |
|           | Internal Code | -   | Code              | -          |
|           | Rev.          | Size Page                                   | Scale             | Data       |
|           | 16            | A3  | 1:1               | 01/10/2021 |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

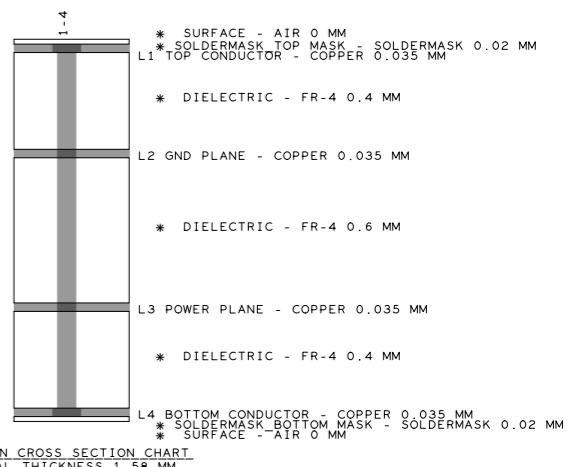
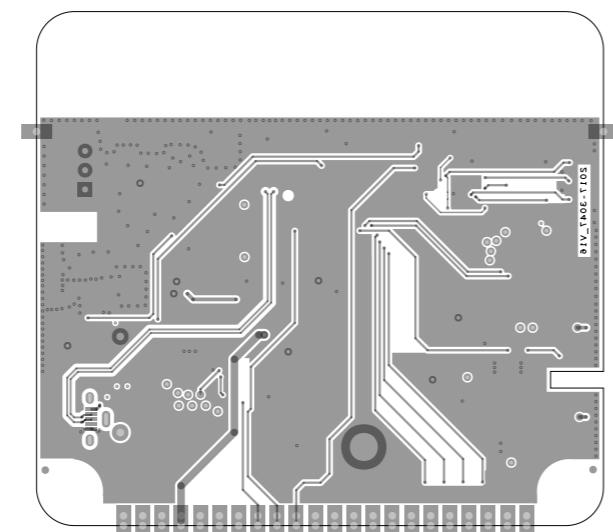
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
|--------|------------|--------------|------------------------|------------------------|-----------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |

#### MANUFACTURING SPECIFICATIONS

|                          |                          |                              |         |
|--------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)       | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO.O LAYERS              | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE      | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE       | 35um                     | BLIND VIA                    | NO      |
| FINISH                   | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR             | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR         | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL      | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL        | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                      | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|                  |   |       |                   |
|------------------|---|-------|-------------------|
| <b>Blues Inc</b> | Project name                                |       | Board name        |
|                  | NOTEBOOK                                    |       | NOTECARRIER-M2-AL |
| Designed by      | FAE Technology SpA - Gazzaniga (BG) - Italy |       |                   |
| Project Code     | 2017-3047                                   |       |                   |
| Internal Code    | -   |       | Code              |
| Rev.             | Size Page                                   | Scale | Date              |
| 16               | A3  | 1:1   | 01/10/2021        |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

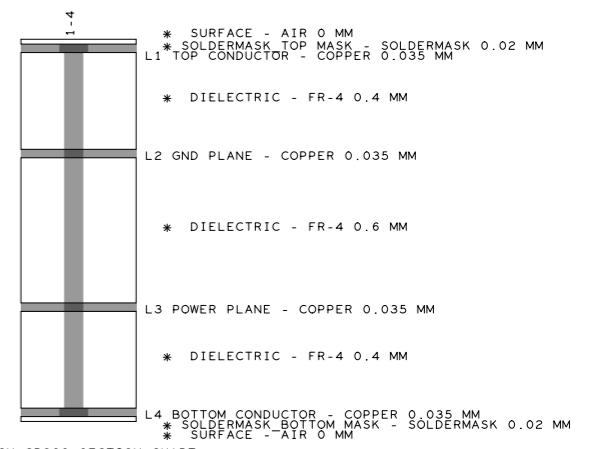
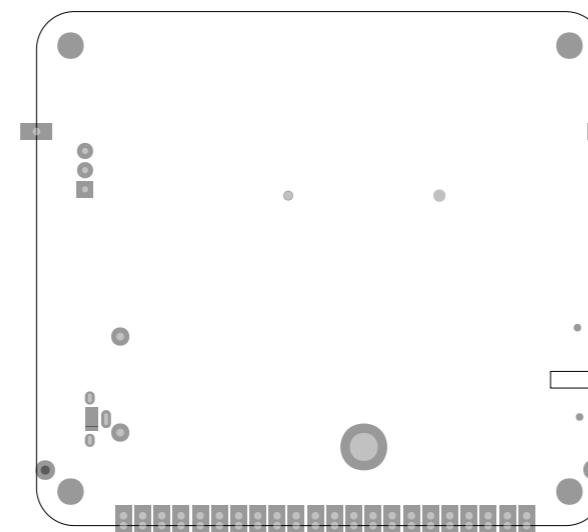
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
|--------|------------|--------------|------------------------|------------------------|-----------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |

#### MANUFACTURING SPECIFICATIONS

|                         |                          |                              |         |
|-------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)      | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO. OF LAYERS           | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE     | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE      | 35um                     | BLIND VIA                    | NO      |
| FINISH                  | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR            | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR        | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL     | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL       | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                     | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|  |   |                 |                   |
|--|---|-----------------|-------------------|
| <b>Blues Inc</b><br><br>Copyright (c) 2020 Blues Inc | Project name  |                 | Board name        |
|  | NOTEBOOK  |                 | NOTECARRIER-M2-AL |
|  | Designed by FAE Technology SpA - Gazzaniga (BG) - Italy |                 |                   |
|  | Project Code 2017-3047                                  |                 |                   |
|  | Internal Code -   |                 | Code -            |
|  | Rev. 16   | Size Page A3    | Scale 1:1         |
|  |   | Data 01/10/2021 |                   |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

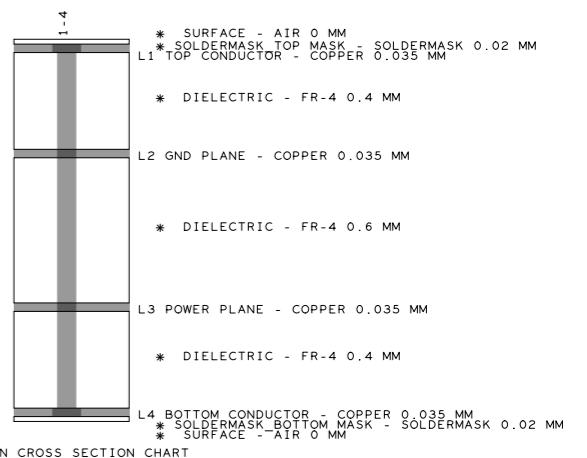
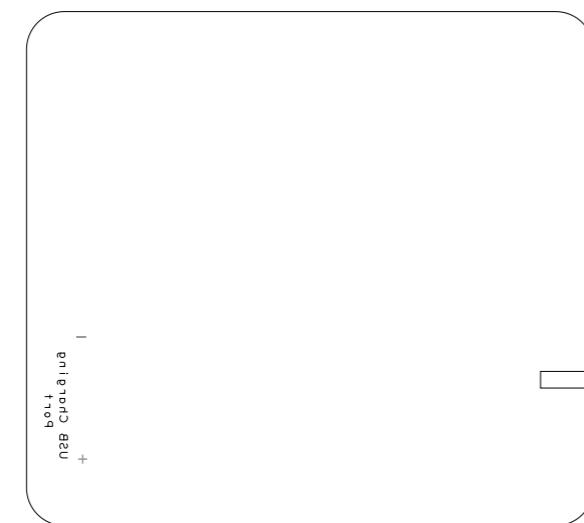
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
|--------|------------|--------------|------------------------|------------------------|-----------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |

#### MANUFACTURING SPECIFICATIONS

|                         |                          |                              |         |
|-------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)      | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO.OF LAYERS            | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE     | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE      | 35um                     | BLIND VIA                    | NO      |
| FINISH                  | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR            | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR        | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL     | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL       | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                     | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|           |               |   |                   |
|-----------|---------------|---|-------------------|
| Blues Inc | Project name  |   | Board name        |
|           | NOTEBOOK      |   | NOTECARRIER-M2-AL |
|           | Designed by   | FAE Technology SpA - Gazzaniga (BG) - Italy |                   |
|           | Project Code  | 2017-3047                                   |                   |
|           | Internal Code | -   | Code -            |
|           | Rev.          | Size Page                                   | Scale             |
|           | 16            | A3  | 1:1               |
|           |               |   | Data 01/10/2021   |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

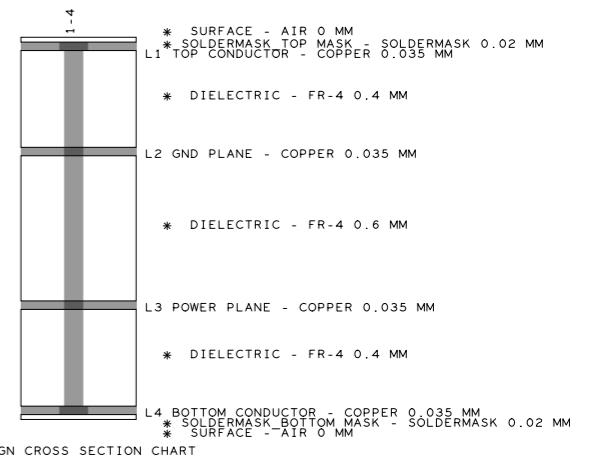
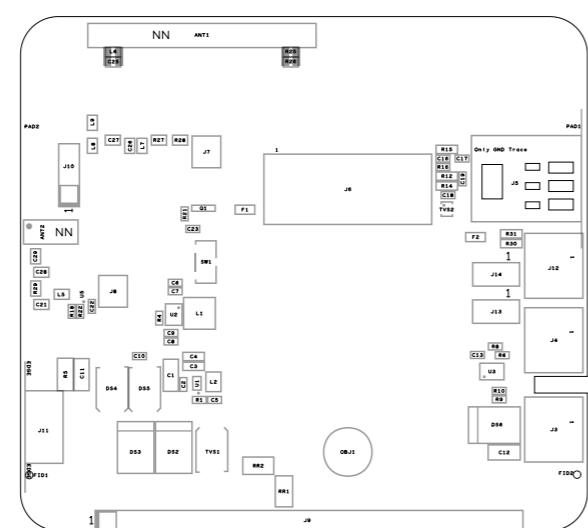
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
|--------|------------|--------------|------------------------|------------------------|-----------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |
|        |            |              |                        |                        |           |

#### MANUFACTURING SPECIFICATIONS

|                         |                          |                              |         |
|-------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)      | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO.OF LAYERS            | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE     | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE      | 35um                     | BLIND VIA                    | NO      |
| FINISH                  | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR            | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR        | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL     | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL       | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                     | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|  |   |           |                   |
|--|---|-----------|-------------------|
|  | Project name  |           | Board name        |
|  | NOTEBOX   |           | NOTECARRIER-M2-AL |
|  | Designed by FAE Technology SpA - Gazzaniga (BG) - Italy |           |                   |
|  | Project Code 2017-3047                                  |           |                   |
|  | Internal Code -   |           | Code -            |
|  | Rev.  | Size Page | Scale             |
|  | 16  | A3        | 1:1               |
|  |   |           | Data 01/10/2021   |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

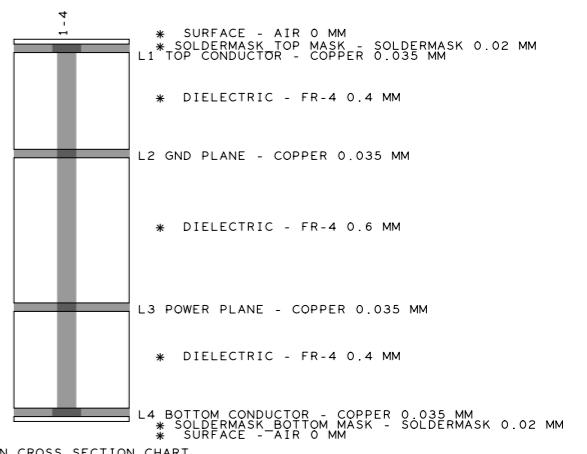
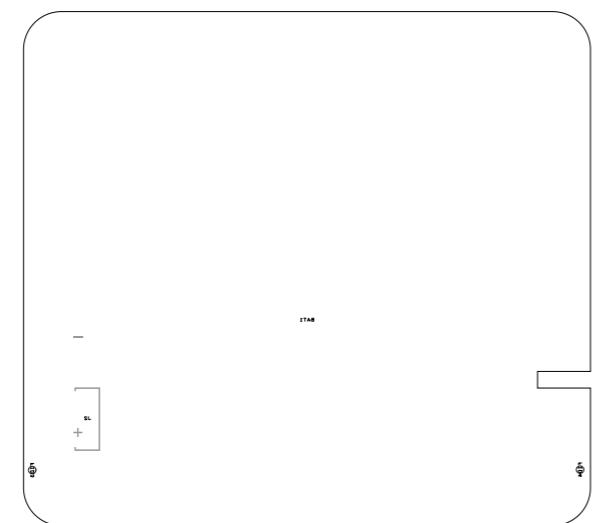
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLLERANCE |
|--------|------------|--------------|------------------------|------------------------|------------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%    |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%    |
|        |            |              |                        |                        |            |
|        |            |              |                        |                        |            |
|        |            |              |                        |                        |            |

#### MANUFACTURING SPECIFICATIONS

|                          |                          |                              |         |
|--------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)       | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO.OF LAYERS             | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE      | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE       | 35um                     | BLIND VIA                    | NO      |
| FINISH                   | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR             | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR         | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL      | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL        | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                      | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|   |              |        |            |  |  |  |
|---|--------------|--------|------------|--|--|--|
| <b>Blues Inc</b>  | Project name |        | Board name |  |  |  |
|   | NOTEBOOK     |        |            |  |  |  |
| Designed by FAE Technology SpA - Gazzaniga (BG) - Italy |              |        |            |  |  |  |
| Project Code 2017-3047                                  |              |        |            |  |  |  |
| Internal Code -   |              | Code - |            |  |  |  |
| Rev.  | Size Page    | Scale  | Data       |  |  |  |
| 16  | A3           | 1:1    | 01/10/2021 |  |  |  |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

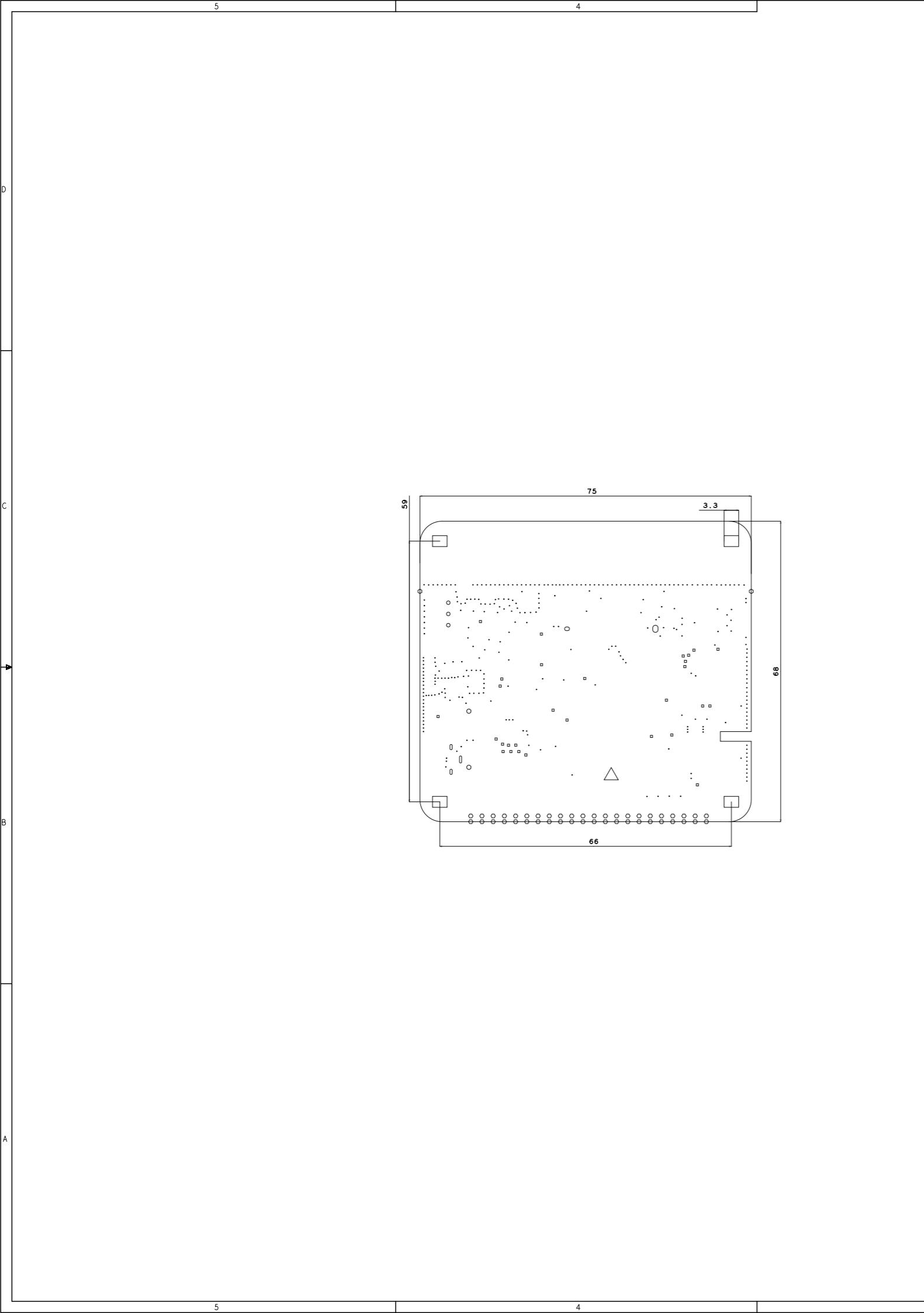
#### IMPEDANCE CONTROL TABLE

| LAYER  | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLLERANCE |
|--------|------------|--------------|------------------------|------------------------|------------|
| TOP    | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%    |
| BOTTOM | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%    |
|        |            |              |                        |                        |            |
|        |            |              |                        |                        |            |
|        |            |              |                        |                        |            |
|        |            |              |                        |                        |            |

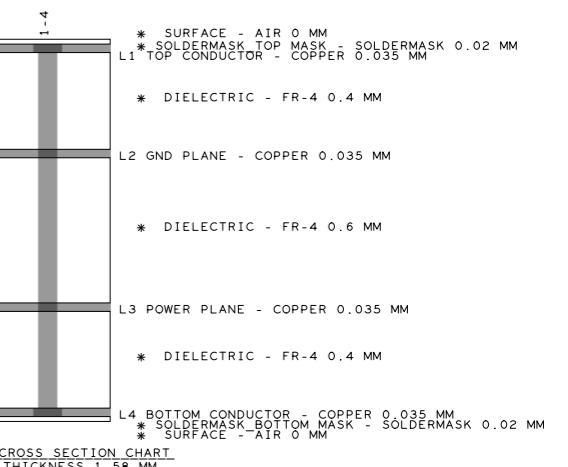
#### MANUFACTURING SPECIFICATIONS

|                          |                          |                              |         |
|--------------------------|--------------------------|------------------------------|---------|
| BOARD SIZE (XxYxZ)       | 75x68x1.6mm              | IPC-6012 - IPC-A-600         | CLASS 2 |
| BOARD TOLLERANCE (X Y Z) | +/-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |
| NO.OF LAYERS             | 4                        | UL-MARKING                   | YES     |
| BASE COPPER OUTSIDE      | 17um                     | MICROVIA (hole < 100um)      | NO      |
| BASE COPPER INSIDE       | 35um                     | BLIND VIA                    | NO      |
| FINISH                   | ENIG                     | BURIED VIA                   | NO      |
| SOLDER COLOR             | BLACK                    | VIA FILL/VIA IN PAD          | NO      |
| SILKSCREEN COLOR         | WHITE                    | MIN. VIA SIZE                | 0.2mm   |
| DIELECTRIC MATERIAL      | FR4-TG150                | MIN. TRACE SPACING           | 0.15mm  |
| IMPEDANCE CONTROL        | YES                      | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |
| CTI                      | 175V                     | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |

|                 |   |              |                    |
|-----------------|---|--------------|--------------------|
|                 | Project name  |              | Board name         |
|                 | NOTEBOX   |              | NOTE CARRIER-M2-AL |
|                 | Designed by FAE Technology SpA - Gazzaniga (BG) - Italy |              |                    |
|                 | Project Code 2017-3047                                  |              |                    |
|                 | Internal Code -   |              | Code -             |
|                 | Rev. 16   | Size Page A3 | Scale 1:1          |
| Data 01/10/2021 |   |              |                    |



| DRILL CHART: TOP to BOTTOM   |               |               |            |     |
|------------------------------|---------------|---------------|------------|-----|
| ALL UNITS ARE IN MILLIMETERS |               |               |            |     |
| FIGURE                       | FINISHED SIZE | TOLERANCE     | TYPE       | QTY |
| •                            | 0.2           | +0.075/-0.075 | PLATED     | 310 |
| □                            | 0.5           | +0.075/-0.075 | PLATED     | 29  |
| ○                            | 0.81          | +0.075/-0.075 | PLATED     | 3   |
| ○                            | 1.0           | +0.075/-0.075 | PLATED     | 44  |
| ○                            | 1.0           | +0.075/-0.075 | PLATED     | 2   |
| ○                            | 1.02          | +0.075/-0.075 | PLATED     | 2   |
| △                            | 3.7           | +0.075/-0.075 | PLATED     | 1   |
| ○                            | 1.1           | +0.075/-0.075 | NON-PLATED | 1   |
| ○                            | 1.6           | +0.075/-0.075 | NON-PLATED | 1   |
| □                            | 3.3           | +0.1/-0.1     | NON-PLATED | 4   |
| ○                            | 1.2x0.5       | +0.0/-0.0     | PLATED     | 2   |
| ○                            | 1.6x0.5       | +0.0/-0.0     | PLATED     | 1   |



TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

| IMPEDANCE CONTROL TABLE |            |              |                        |                        |           |
|-------------------------|------------|--------------|------------------------|------------------------|-----------|
| LAYER                   | TRACE [MM] | SPACING [MM] | IMPEDANCE SINGLE-ENDED | IMPEDANCE DIFFERENTIAL | TOLERANCE |
| TOP                     | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
| BOTTOM                  | 0.26       | 0.2          | NA                     | 90 ohm                 | +/- 10%   |
|                         |            |              |                        |                        |           |
|                         |            |              |                        |                        |           |
|                         |            |              |                        |                        |           |

| MANUFACTURING SPECIFICATIONS |                         |                              |         |  |  |
|------------------------------|-------------------------|------------------------------|---------|--|--|
| BOARD SIZE (XxYxZ)           | 75x68x1.6mm             | IPC-6012 - IPC-A-600         | CLASS 2 |  |  |
| BOARD TOLERANCE (X Y Z)      | +-0.2   +/-0.2   +/-10% | E-TESTING                    | YES     |  |  |
| NO. OF LAYERS                | 4                       | UL-MARKING                   | YES     |  |  |
| BASE COPPER OUTSIDE          | 17um                    | MICROVIA (hole < 100um)      | NO      |  |  |
| BASE COPPER INSIDE           | 35um                    | BLIND VIA                    | NO      |  |  |
| FINISH                       | ENIG                    | BURIED VIA                   | NO      |  |  |
| SOLDER COLOR                 | BLACK                   | VIA FILL/VIA IN PAD          | NO      |  |  |
| SILKSCREEN COLOR             | WHITE                   | MIN. VIA SIZE                | 0.2mm   |  |  |
| DIELECTRIC MATERIAL          | FR4-TG150               | MIN. TRACE SPACING           | 0.15mm  |  |  |
| IMPEDANCE CONTROL            | YES                     | OUTER LAYER MIN. TRACE WIDTH | 0.2mm   |  |  |
| CTI                          | 175V                    | INNER LAYER MIN. TRACE WIDTH | 0.2mm   |  |  |

|                  |               |   |                    |
|------------------|---------------|---|--------------------|
| <b>Blues Inc</b> | Project name  |   | Board name         |
|                  | NOTEBOX       |   | NOTE CARRIER-M2-AL |
|                  | Designed by   | FAE Technology SpA - Gazzaniga (BG) - Italy |                    |
|                  | Project Code  | 2017-3047                                   |                    |
|                  | Internal Code | -   | Code -             |
|                  | Rev.          | Size Page                                   | Scale              |
|                  | 16            | A3  | 1:1                |
|                  |               |   | Data 01/10/2021    |