



SCRIPT

for defining the insulator construction of PCB-s

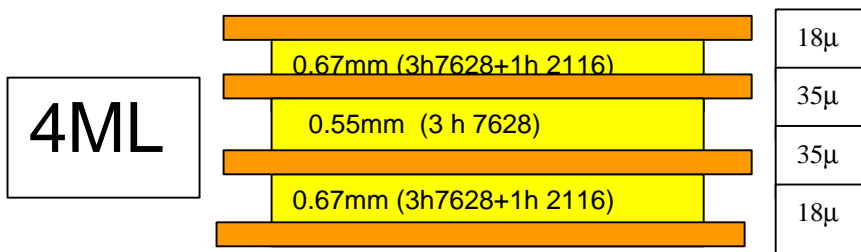
The purpose of this script is to help the CAM station operators
In defining the insulator construction of PCB-s preparing the work travelers. The data here apply to standard constructions, as well as some non-standard constructions used up to now.

Note:

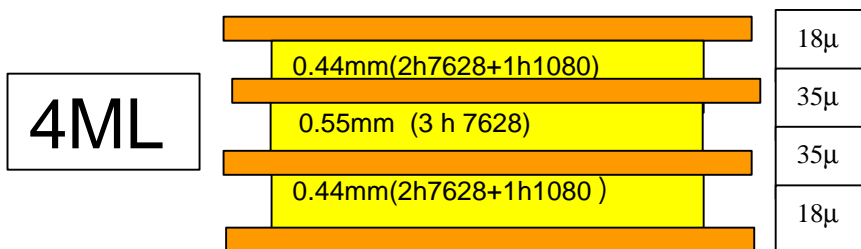
- The insulator thickness here includes the innerlayer copper thickness+prepregs+cores ,
- The overall thickness includes the innerlayer+outlayer copper thickness+prepregs+cores(without solder mask).

1.Construction for 4ML

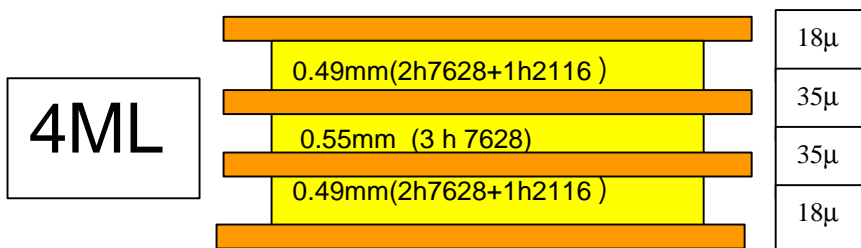
insulator thickness: 2.0 mm
overall thickness: 2.1 mm



insulator thickness: 1.5 mm
overall thickness: 1.6 mm



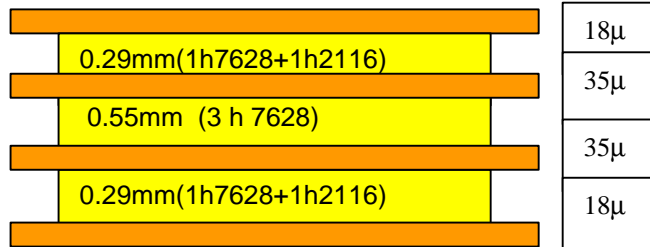
insulator thickness: 1.6 mm
overall thickness: 1.7 mm





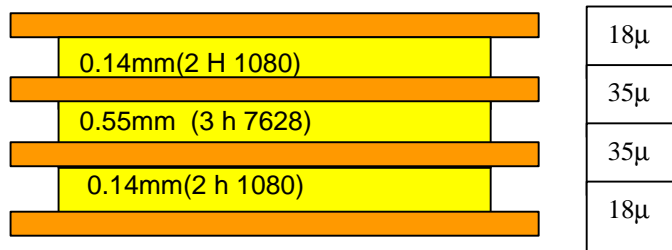
insulator thickness: 1.2 mm
overall thickness: 1.3 mm

4ML



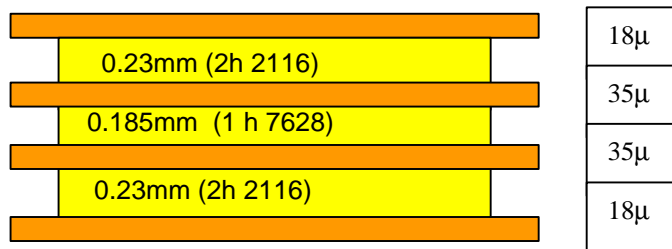
insulator thickness: 1.0 mm
overall thickness: 1.1 mm

4ML



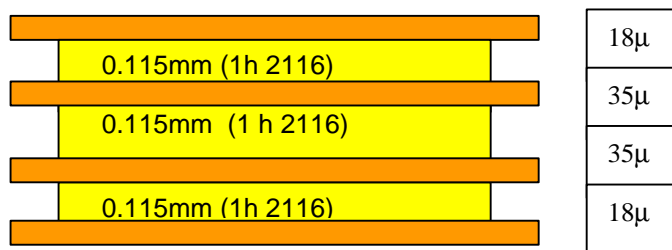
insulator thickness: 0.8 mm
overall thickness: 0.9 mm

4ML



insulator thickness: 0.4 mm
overall thickness: 0.5 mm

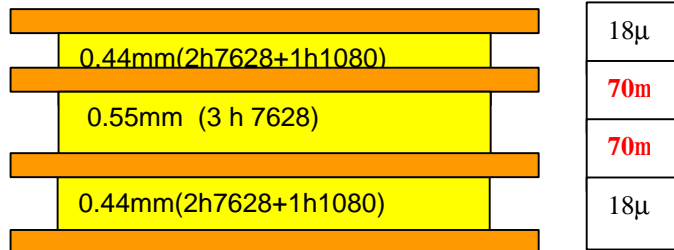
4ML





insulator thickness: 1.6 mm
overall thickness: 1.7 mm

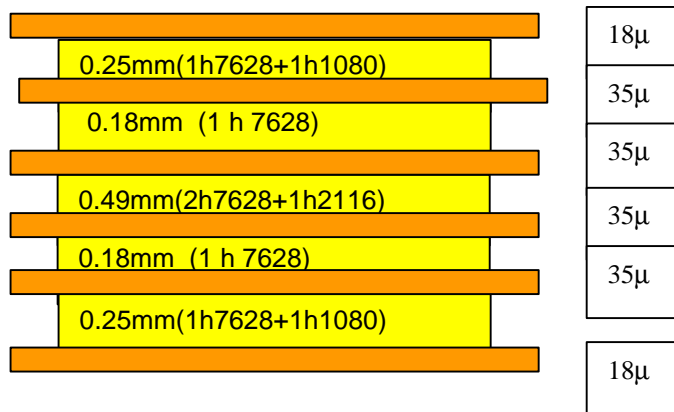
4ML



2. Construction for 6ML

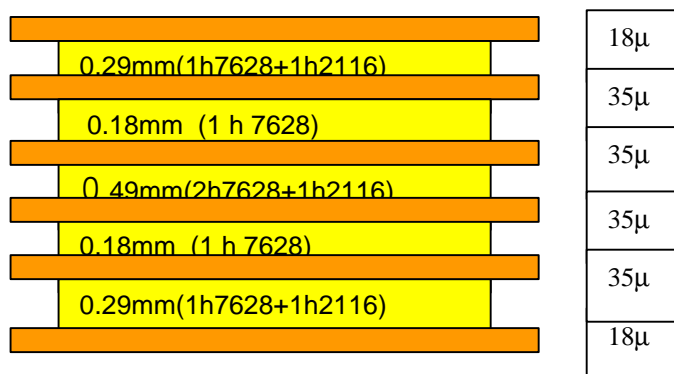
insulator thickness: 1.5 mm
overall thickness: 1.6 mm

6ML



insulator thickness: 1.6 mm
overall thickness: 1.7 mm

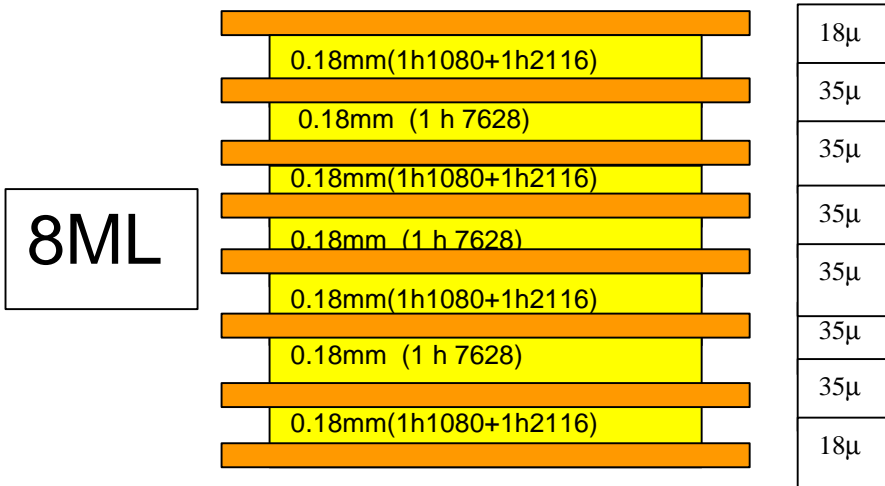
6ML



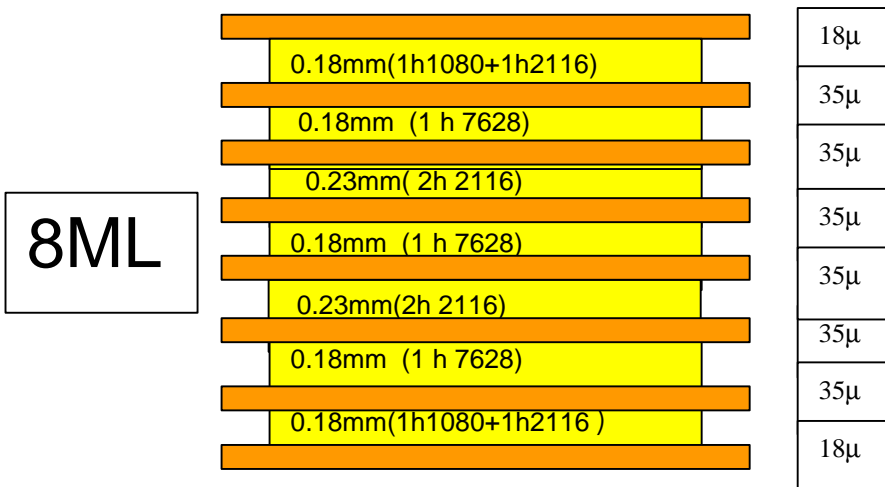


3. Construction for 8ML

insulator thickness: 1.5 mm
overall thickness: 1.6 mm



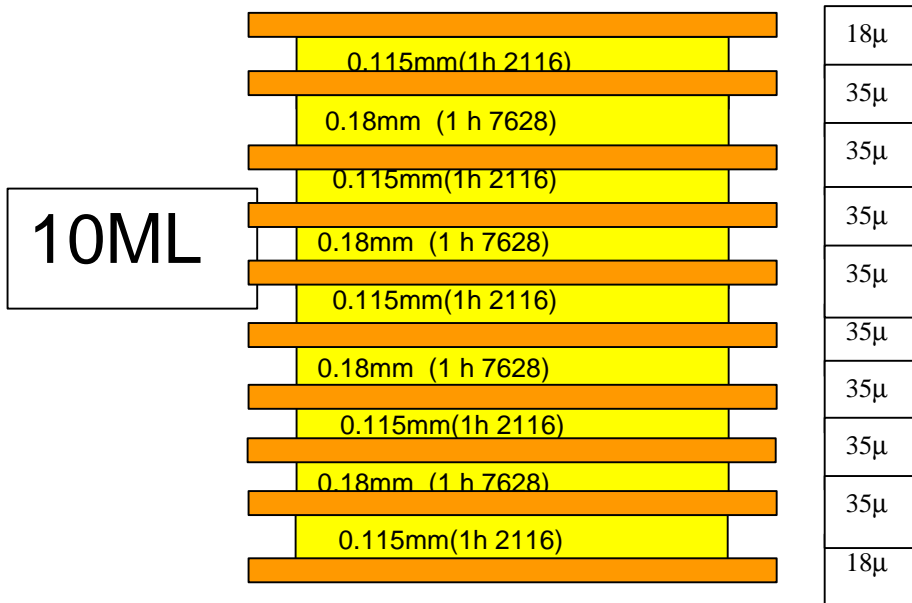
insulator thickness: 1.6 mm
overall thickness: 1.7 mm





4. Construction for 10ML

insulator thickness: 1.6 mm
overall thickness: 1.7 mm

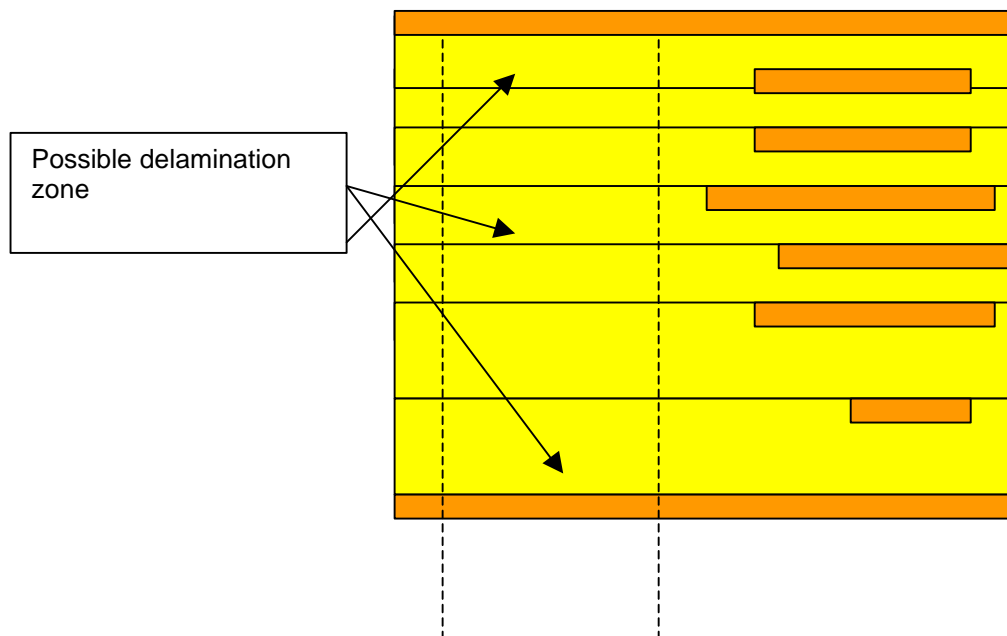


- The thickness is being calculated with +/-8% tolerance, according to the customers definition of the thickness (insulator or overall thickness).

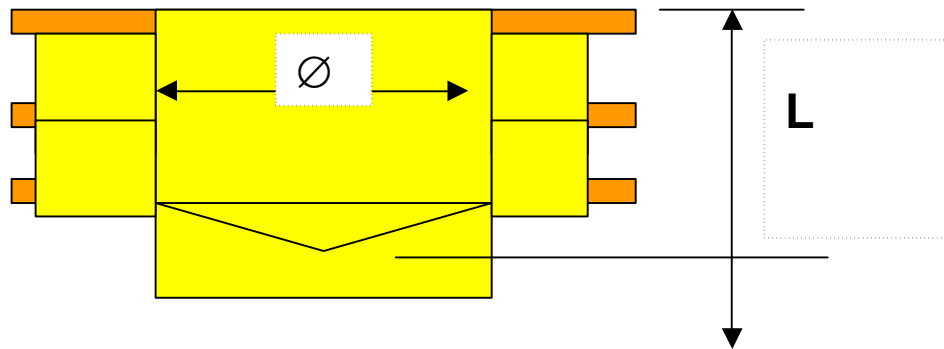


Notes when defining the ML constructions:

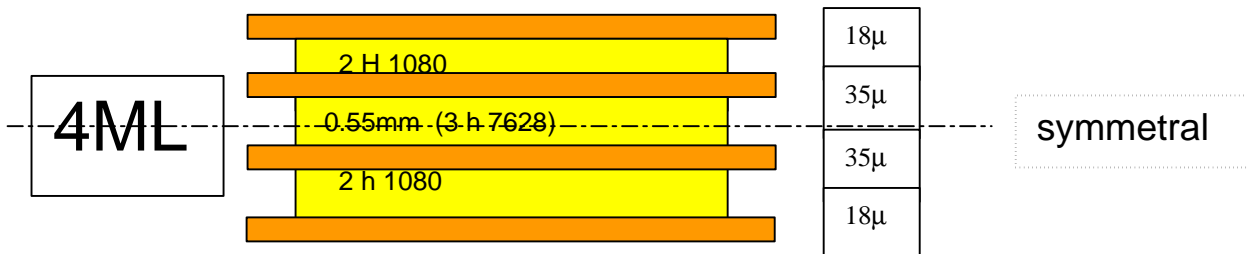
- thickness of different types of prepregs after pressing
 - 1080= 65-70 mikr.
 - 2116 =110-115 mikr.
 - 7628 = 180-190 mikr.
- When pressing with 70 microns foil on the innerlayer, put the following minimum of prepregs on it
 - 1 x 7628 (for 4ML)
 - 2 x 2116 (for 6ML)
 - 3 x 1080 (for 8ML)
- When making 8ML panel or more, on the innerlayers zone where there is no copper structure or designs, please put "dummy pads" (passive copper pads) that would reduce the delamination possibility. You should ask for customers permission for this first.



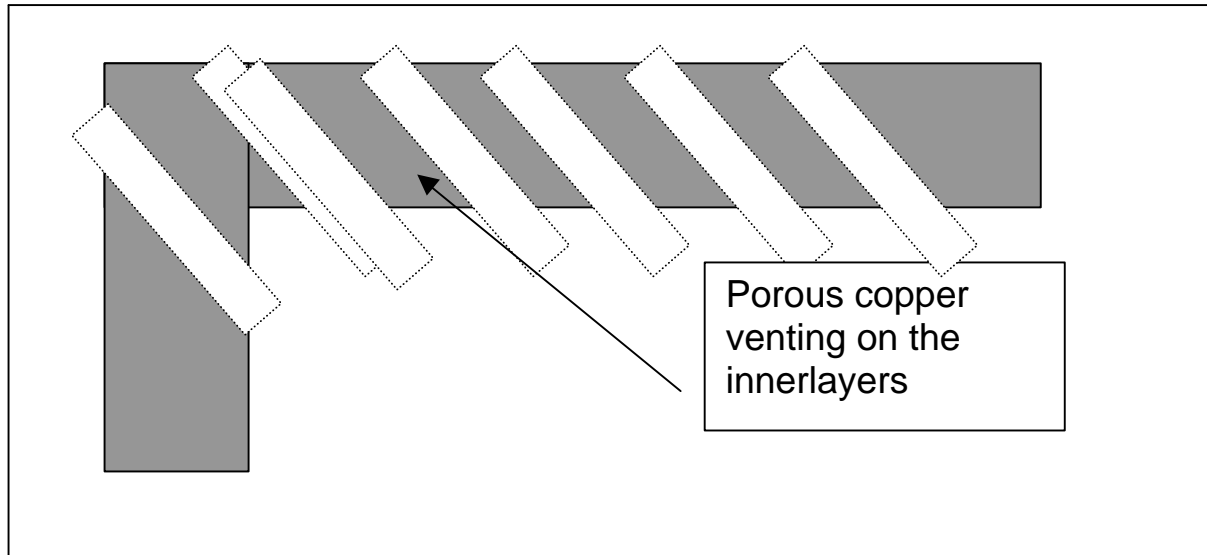
- when making a construction for blind vias, the drilling diameter \varnothing should be at least 70 microns bigger than the hole depth L (including the insulators, copper foils and the drill bit pick)



- the different ply of preregs should be placed symmetrically to the center (symmetral) of the panel



- when pressing with 70 microns copper on the innerlayers, the venting should be done "porous", so it would easy take the air during vacuuming.



September 2005

Pressing/Assembling

QS Controll