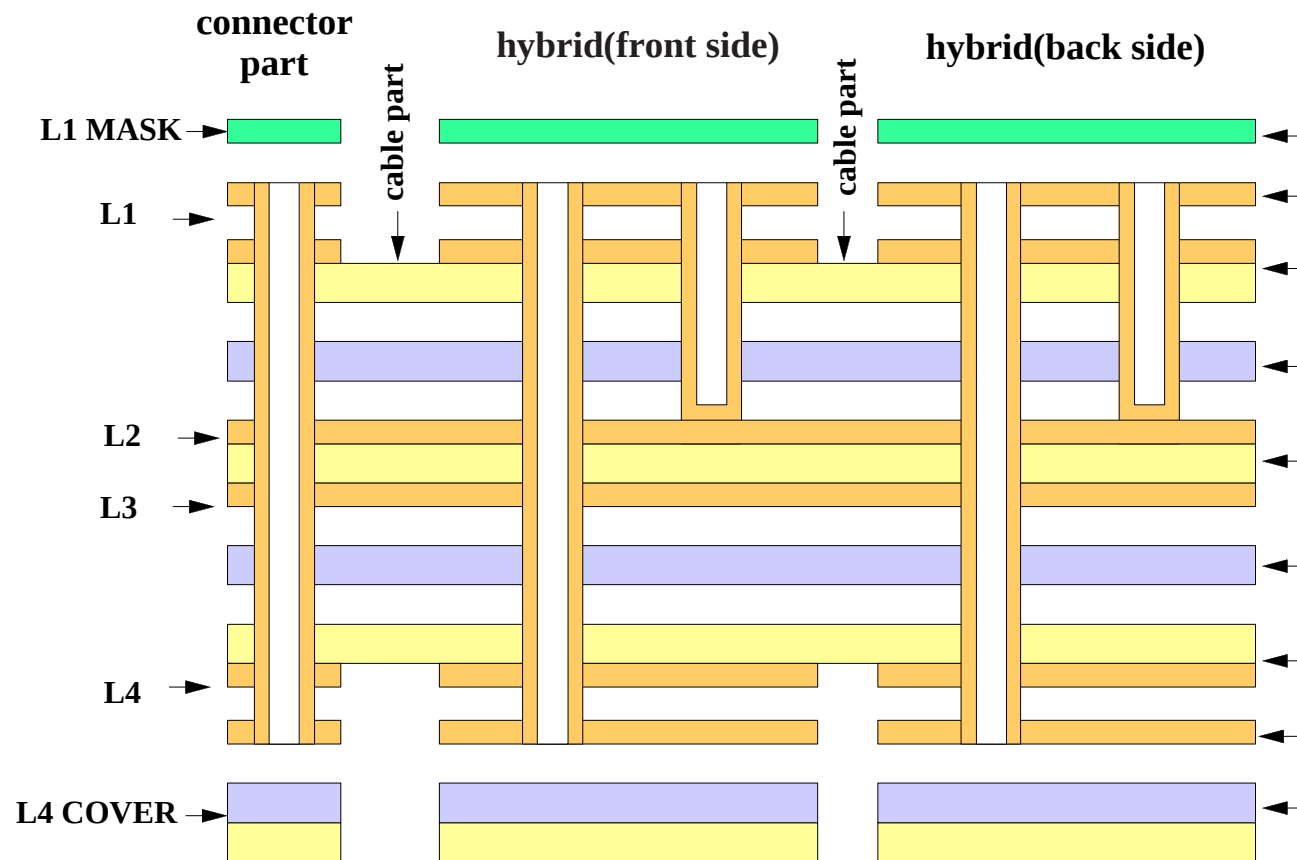
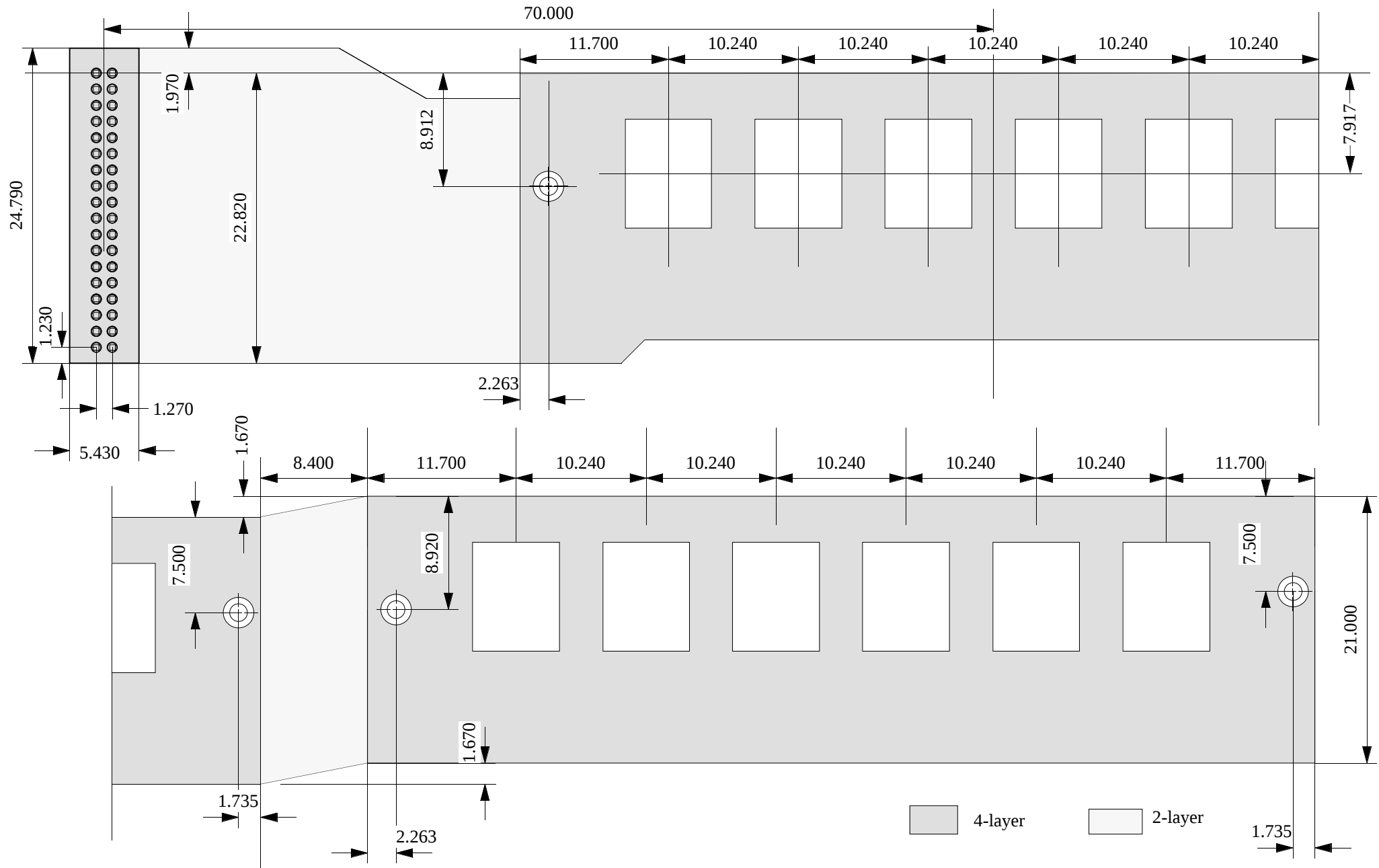




Cu/Kapton high density interconnect technology:
 Through-hole 300 μm dia., Land 500 μm dia.
 Laser-via 150 μm dia., Land 300 μm dia., surface build-up
 Min. line width 100 μm , min. gap 90 μm

*Layer Structure of the ABCD Kapton Hybrid
 version-3*

Material	Thickness μm
Photo-solder resist	20
Through-hole plating (50%mesh)	20
Polyimide-Copper(single-sided) 1/3 oz(12 μm)Cu, 1 mil PI, Adhesive-less	37
Adhesive	25
Polyimide-Copper(double sided) 1/3 oz Cu, 1 mil PI, 1/3 oz Cu Adhesive-less	49
Adhesive	25
Polyimide-Copper(single-sided) 1/3 oz(12 μm) Cu, 1 mil PI, Adhesive-less	37
Through-hole plating (50%mesh)	20
Polyimide cover film 1/2 mil, Adhesive 33 μm	46
Total : circuit part cable part	279 149
Surface treatment non-electrolysis gold plating (0.3 μm Au, < 3 μm Ni)	

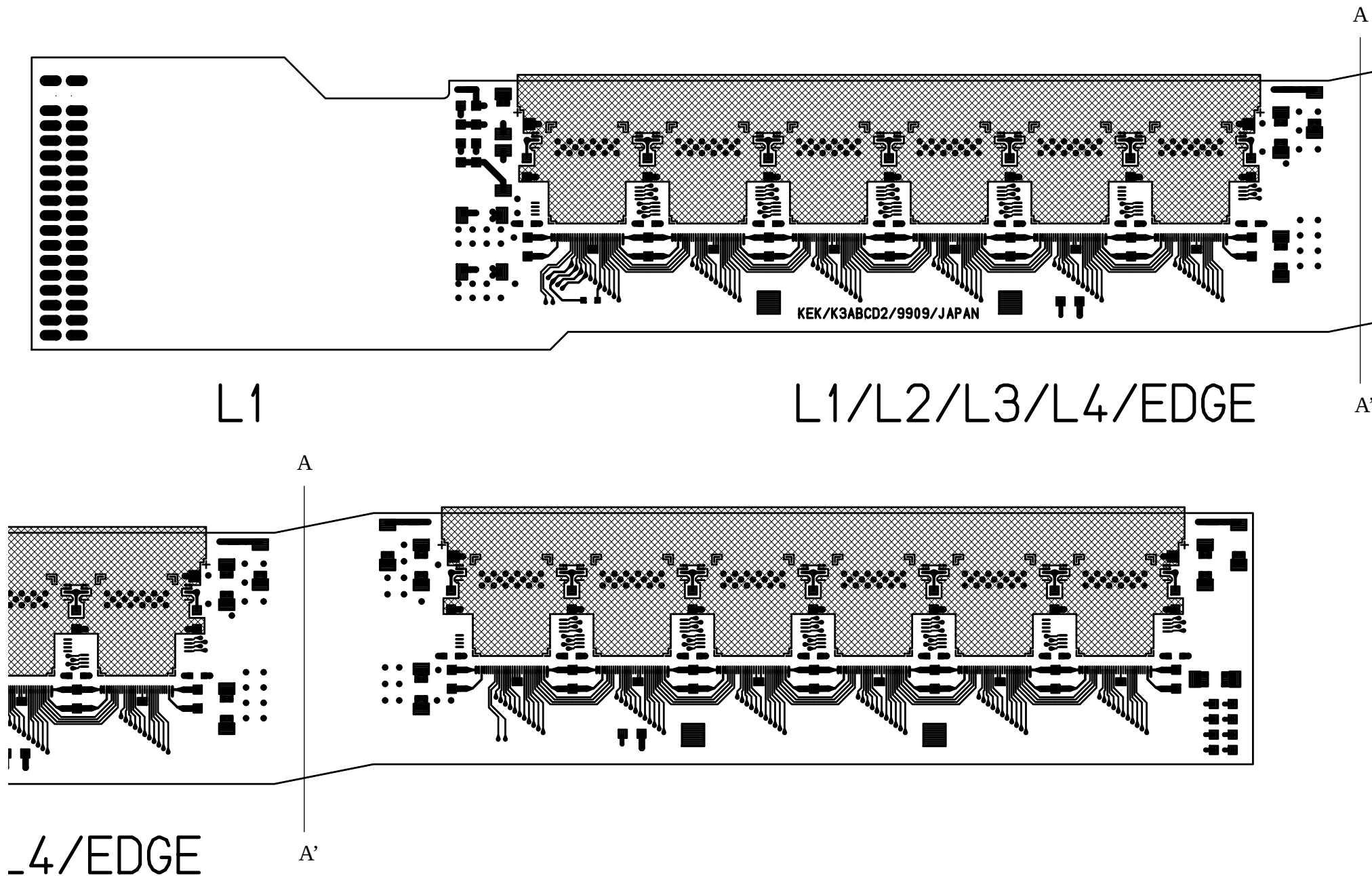


Dimensions of the ABCD2T/2NT Kapton Hybrid

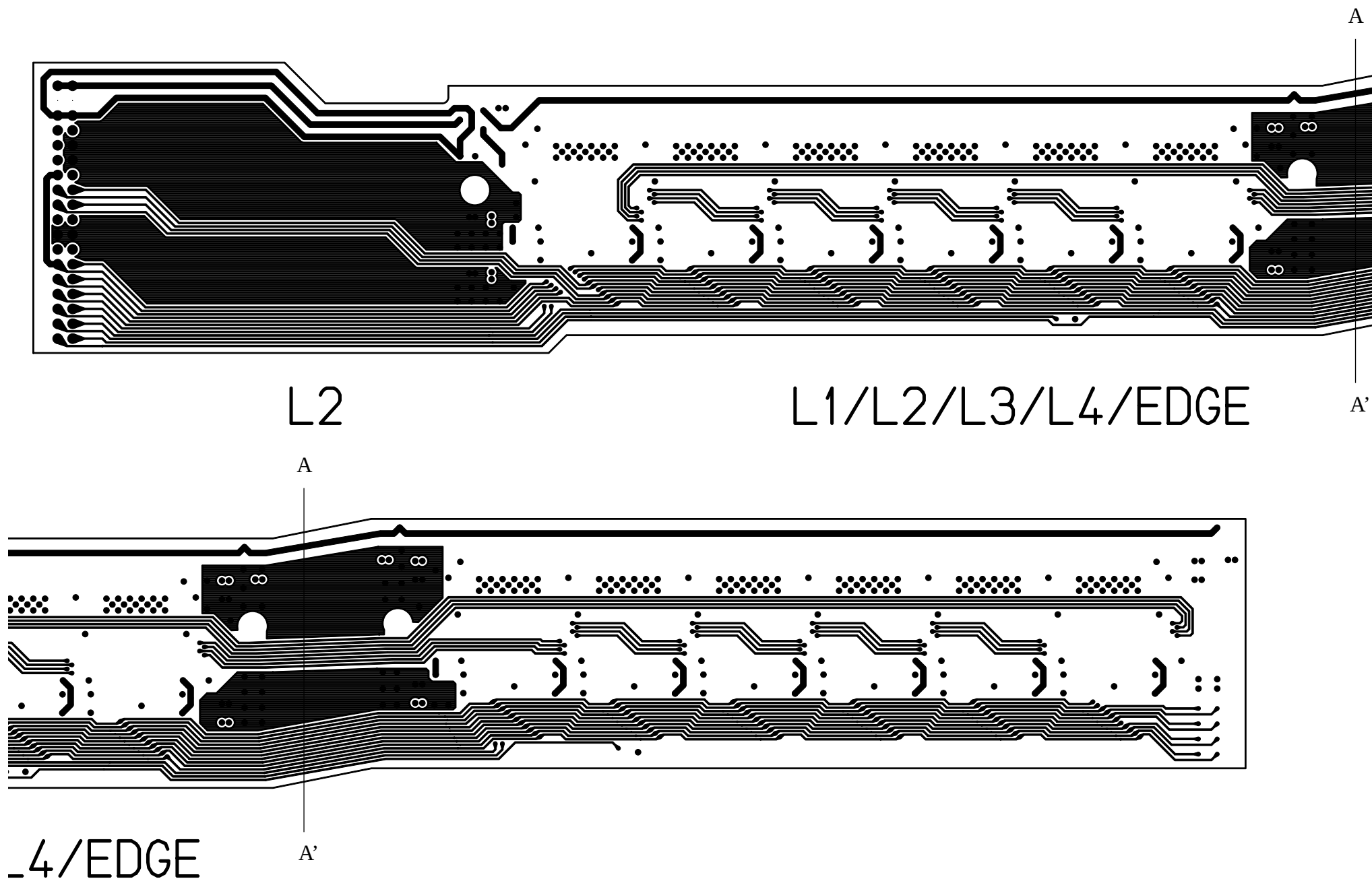
dx=-12.00
dy=-33.33

99.2.12 T.Kondo
99.4.15, 99.5.18
00.1.10, 00.1.15, 00.2.14

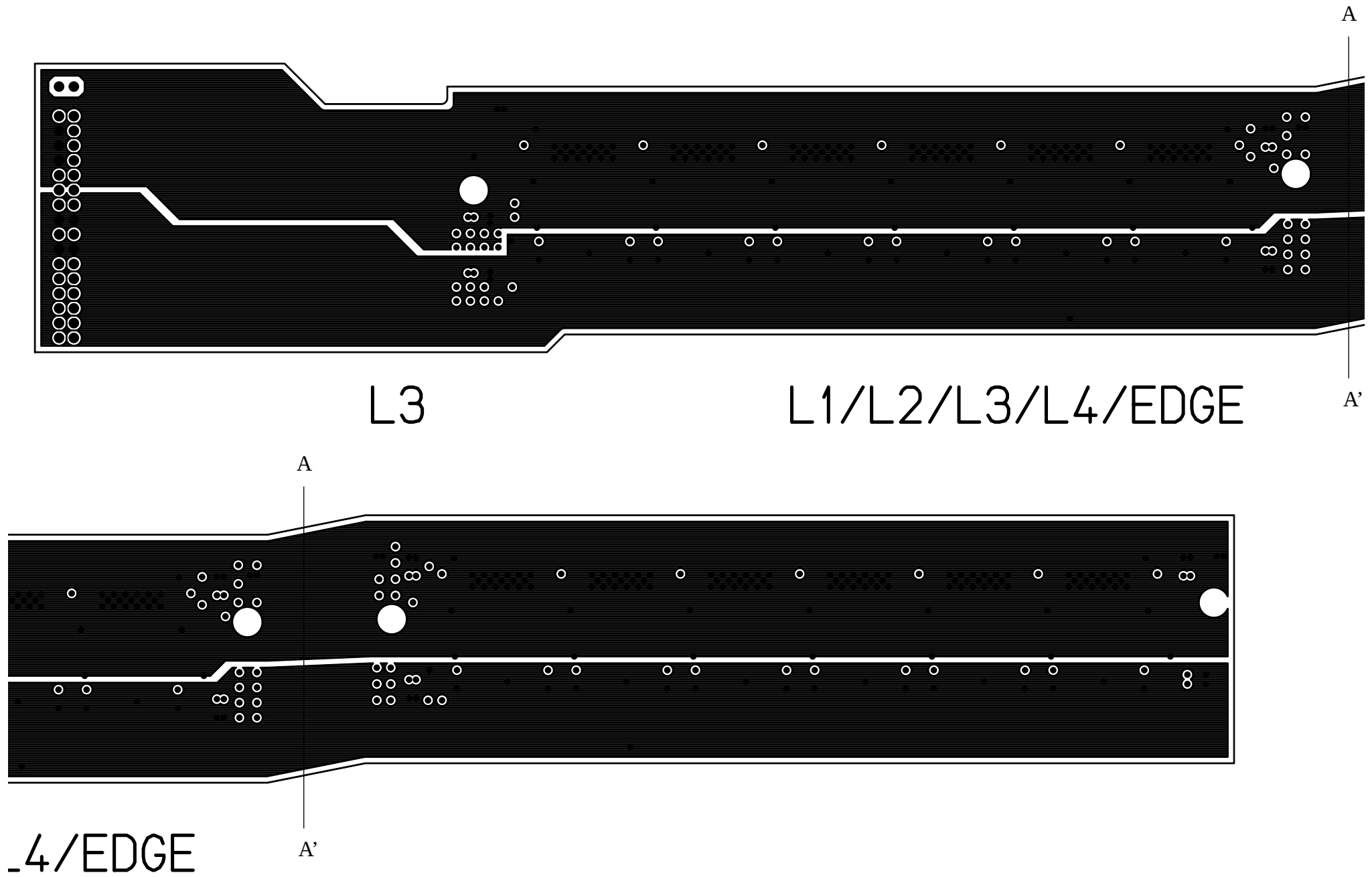
Kapton Barrel Hybrid for ABCD2, Layer-1 (Aug. 1999)



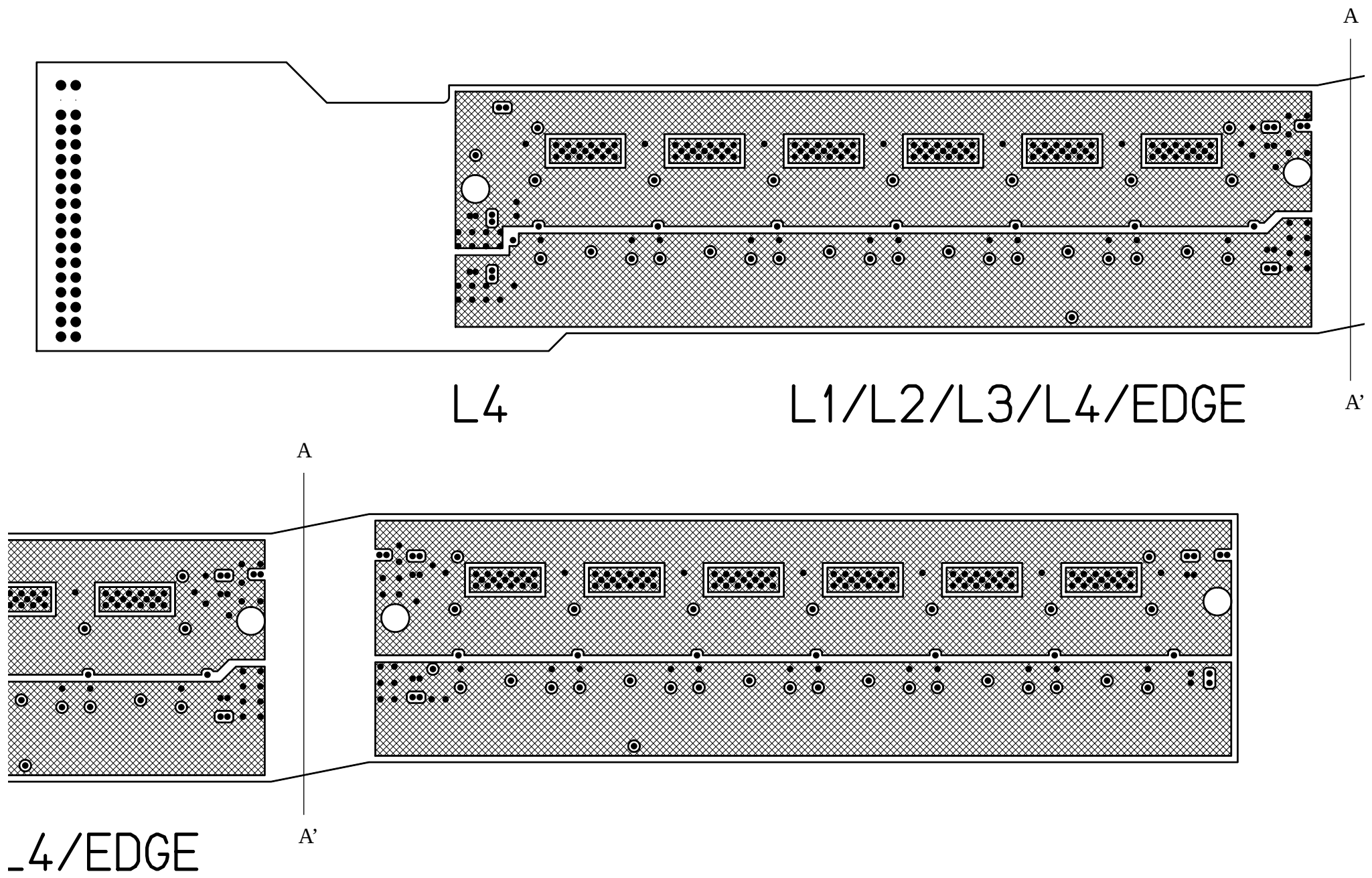
Kapton Barrel Hybrid for ABCD2, Layer-2 (Aug. 1999)



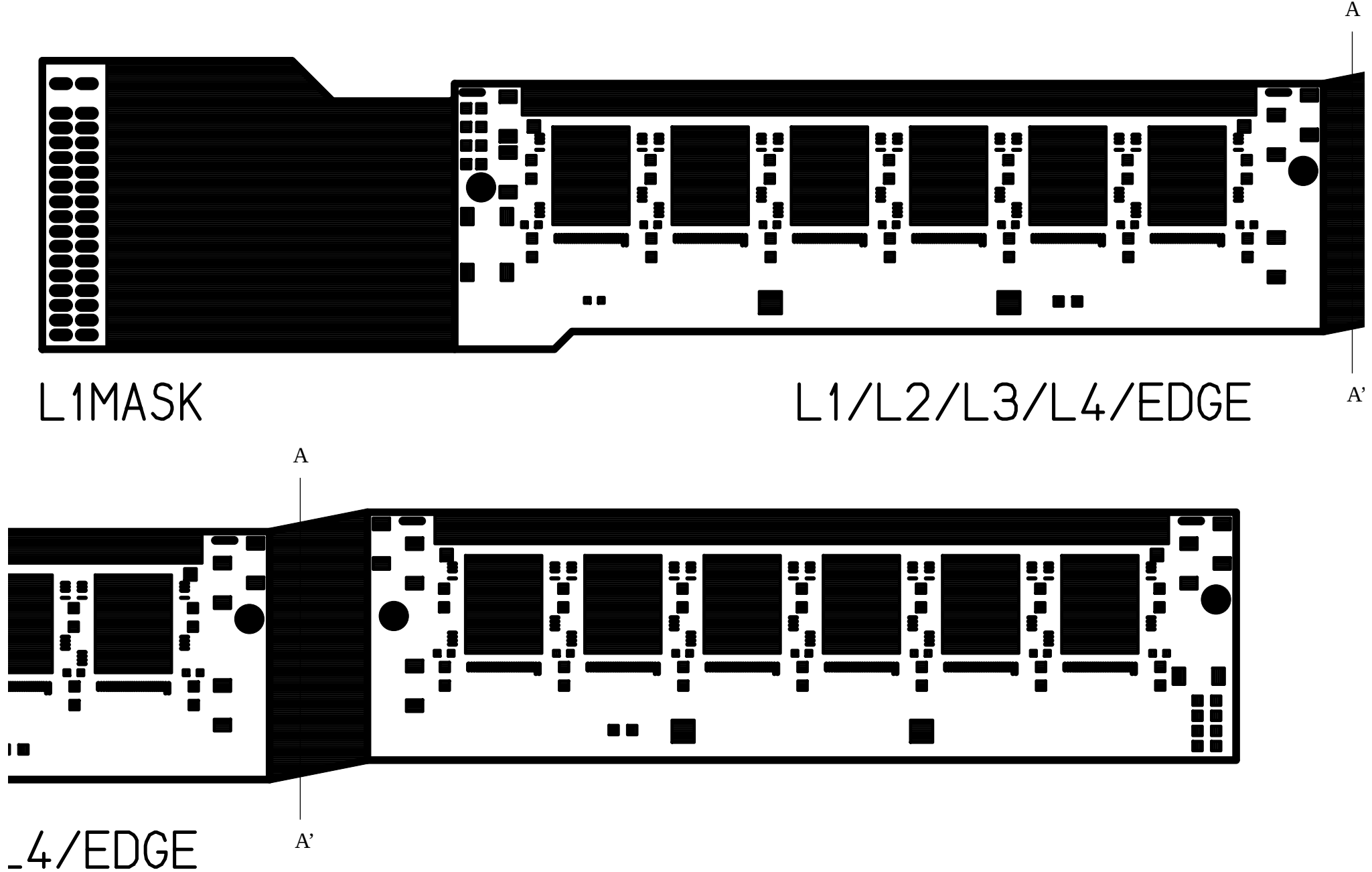
Kapton Barrel Hybrid for ABCD2, Layer-3 (Aug. 1999)

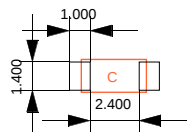


Kapton Barrel Hybrid for ABCD2, Layer-4 (Aug. 1999)



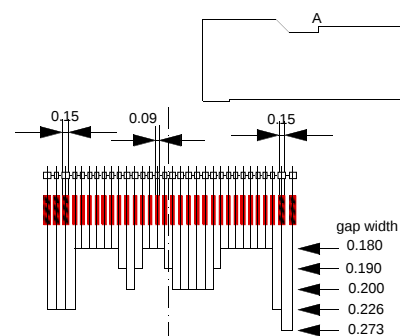
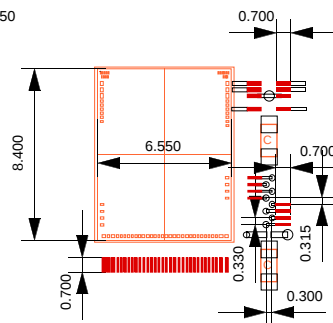
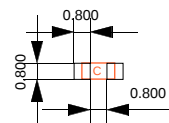
Kapton Barrel Hybrid for ABCD2, Layer-Soldermask (Aug. 1999)





min. line width = 0.1 mm
 min. line gap = 0.09 mm
 throughhole round dia. = 0.5 mm
 throughhole dia. = 0.3 mm
 via-hole round dia. = 0.3 mm
 via-hole diameter = 0.1 mm

ABCD2T/2NT/die=8.400 x 6.550



Layout of Kapton hybrid for ABCD2T/2NT chips

July 20, 1999

Takashi Kohriki, KEK

Pitchdaptor = 2.7x63.5

