Min. Track/Gap (Outher) :	0.15/0.15
Min. Track/Gap (Inner) :	0.125/0.125
SMD Pads Top :	1219
SMD Pads Bottom :	640
Minimum Pitch :	0.50mm
Minimum Annular Ring :	0.25mm
Total no. of holes :	3188
Largest hole size :	4.4
Smallest hole size :	0.25
No. of hole sizes :	19
Connector Gold :	No
Peel-Off mask :	No
Scoring :	No
Internal routing :	No
Manufacturer's Logo :	Yes, See drawing PCB-002
Date Marking :	Yes, See drawing PCB-002
UL Marking :	Yes, See drawing PCB-002

1. GENERAL
   1. Fabricate PCB in accordance with IPC-6012B, Class 2 and IPC-6013 when applicable.
   2. Bow and twist shall be 0.75% or less, measured in accordance with IPC-TM-650, method 2.4.22.
   3. Artwork may be adjusted by the PCB fabricator to compensate for manufacturing process tolerances or impedance requirements.
   4. All dimensions are mm.

2. MATERIALS
   1. Laminate and prepreg to be ISOLA 370HR or equivalent.
   2. Copper foil to be in accordance with IPC-4562.

3. HOLES
   1. Hole sizes are finished hole sizes after plating.
   2. No hole breakout allowed.

4. FINISH
   1. Apply Liquid Photo Image-able solder mask, color Red, per IPC-SM-840, Class H, to both sides of the board over bare copper.
   2. All exposed conductive pattern areas not covered with soldermask or other plating shall be plated with Electroless Nickel Immersion Gold, ENIG, per IPC-4552, suitable for wire-bonding.
   3. Solder mask images that are the same size as the component pads may be enlarged, but shal not be enlarged beyond 0.05mm per side. All other soldermask shall not be enlarged.
   4. Soldermask overlap on smd lands is not allowed.

5 MARKING
   1. UL logo, manufacturer's identification and date code shall be rendered on the top side of the pcb, in silkscreen.
   2. Silkscreen both sides of the pcb using non-conductive expoxy ink, color white. No ink shall be on exposed pads.

6 TEST REQUIREMENTS
   1. 100% netlist verification using the netlist information in the ODB++ data

REV.	BY	NOTES

TIMING MAIN BOARD V2.0

PROJECT : ETPATHFINDER

SHEET NAME : PCB SPECIFICATION

ET nr. : 11500.07.01.2

Designed by : CHARLI

Drawn by : CHARLI

SHEETSIZE : 420 X 297 MM

SHEET 1 OF 3 | A3

Science Park 105 1098XG Amsterdam
+31 (0)20 - 5922000 www.nikhef.nl

Date 2023-10-23

Sheet Number PCB-001

PCB DIMENSIONS : 400,00MM X 155.60MM

REV.	BY	NOTES

TIMING MAIN BOARD V2.0

PROJECT : ETPATHFINDER

SHEET NAME : PCB DIMENSIONS

ET nr. : 11500.07.01.2

Designed by : CHARLI

Drawn by : CHARLI

SHEETSIZE : 420 X 297 MM

SHEET 2 OF 3 | A3

Science Park 105 1098XG Amsterdam
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Date 2023-10-23

Sheet Number PCB-002

Through Holes
All Drills (unless specified) +/- 0.10 (MM)

Symbol	Diameter	Tolerance	Plated	Quantity
A	0.25	+/- 0.05	Yes	2715
B	0.30		Yes	4
C	0.53	+0.05	Yes	30
D	0.90		Yes	31
E	0.90	+/- 0.08	Yes	128
F	0.90	+/- 0.08	Yes	9
G	0.95	+/- 0.08	Yes	9
H	1.00	+/- 0.10	Yes	14
J	1.05	+/- 0.08	Yes	11
K	1.05	+/- 0.10	Yes	2
L	1.10	+/- 0.08	Yes	2
M	1.30	+/- 0.08	Yes	3
N	1.30	+/- 0.08	Yes	4
P	1.40		Yes	10
R	1.60	+/- 0.08	Yes	20
T	1.60	+/- 0.10	Yes	24
U	1.70		Yes	96
V	2.00		Yes	30
W	2.50		Yes	2
X	3.10	+/- 0.08	Yes	2
Y	3.20	+/- 0.08	Yes	16
a	1.10		No	1
b	1.30		No	10
c	1.50		No	2
d	1.60		No	1
e	3.25		No	8
f	4.40		No	2
g	0.95		Yes	2

REV.	BY	NOTES

TIMING MAIN BOARD V2.0

PROJECT : ETPATHFINDER
SHEET NAME : DRILL CHART

Nikhef

ET nr. : 11500.07.01.2
Designed by : CHARLI
Drawn by : CHARLI
SHEETSIZE : 420 X 297 MM
SHEET 3 OF 3 | A3

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Date 2023-10-23
Sheet Number PCB-003