

PCB Specification

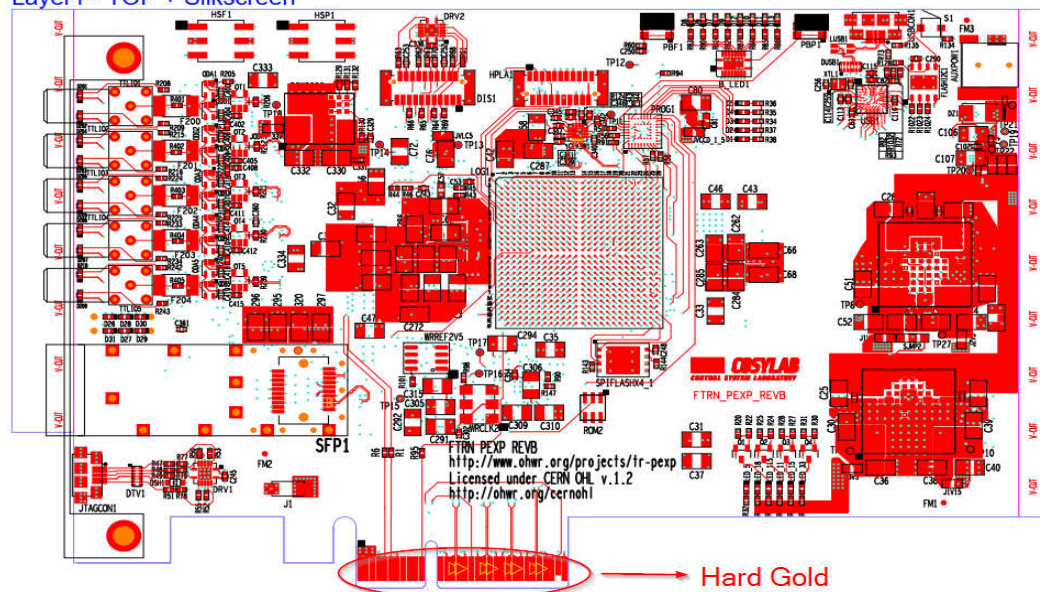
PCB name: FTRN_PCl_e_REVb
 Layer count: 12L
 Base material: FR4, $T_g \geq 170$
 Board dimension: 168 x 103 mm
 Board thickness: 1.6 mm
 Quantity: 8~10

Impedance requirements: All Cu-lines single ended impedance value on all layers 50 Ohm $\pm 15\%$
 All Differential pairs Impedance value on all layers 100 Ohm, 90 Ohm $\pm 10\%$

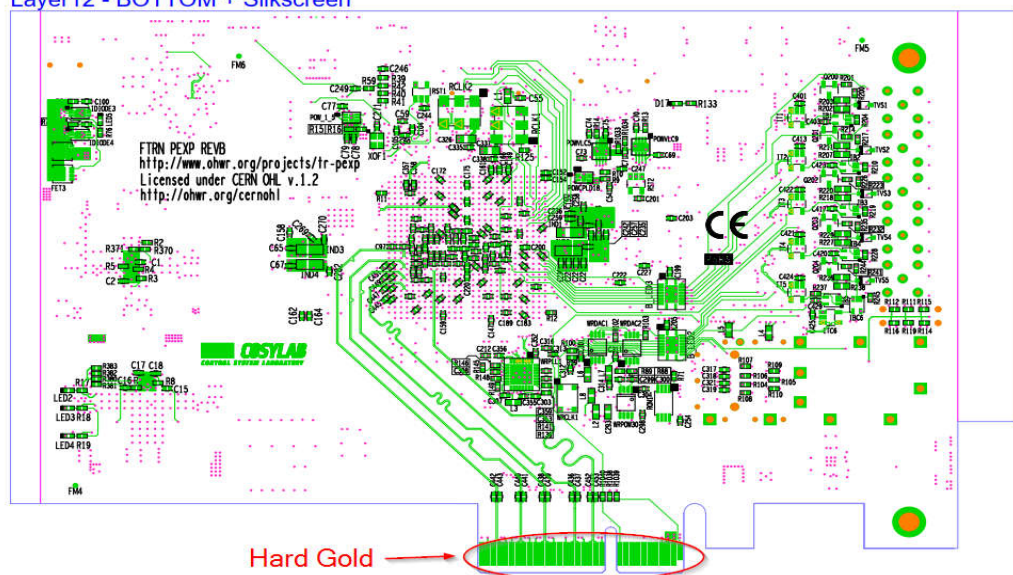
Surface finish: RoHS – ENIG, PCI express conector = HARD GOLD
 Solder mask color: Red
 Legend (Silkscreen): White
 V-cut (Scoring): Yes
 Via-in-pad (capped via): Yes

Manufacturer logo on PCB: NO
 Date code on PCB: YES

Layer1 - TOP + Silkscreen



Layer12 - BOTTOM + Silkscreen



Stackup:

Subclass Name	Type	Material	Thickness (MM)	Conductivity (mho/cm)	Dielectric Constant	Loss Tangent	Negative Artwork	Shield	Width (MM)	Single Impedance (ohm)	Coupling Type	Spacing (MM)	Differential Impedance (ohm)	Unused Pin Pad Suppression	Unused Via Pad Suppression
	SURFACE	AIR		0	1	0									
TOP	CONDUCTOR	COPPER	0,035	595900	4	0			0,093	50	EDGE	0,15	100,32		
	DIELECTRIC	FR-4	0,08	0	3,8	0,035									
2 GND	PLANE	COPPER	0,017	595900	4	0		Yes							
	DIELECTRIC	FR-4	0,12	0	4,2	0,035									
3 DIFF1	CONDUCTOR	COPPER	0,017	595900	4	0			0,085	50	EDGE	0,17	101,35		
	DIELECTRIC	FR-4	0,12	0	3,8	0,035									
4 GND	PLANE	COPPER	0,017	595900	4	0,035		Yes							
	DIELECTRIC	FR-4	0,12	0	4,2	0,035									
5 DIFF2	CONDUCTOR	COPPER	0,017	595900	4	0			0,085	50	EDGE	0,17	101,35		
	DIELECTRIC	FR-4	0,12	0	3,8	0,035									
6 GND	PLANE	COPPER	0,017	595900	4	0		Yes							
	DIELECTRIC	FR-4	0,24	0	4,2	0,035									
7 PWR3V3	PLANE	COPPER	0,017	595900	4	0		Yes							
	DIELECTRIC	FR-4	0,12	0	3,8	0,035									
8 PWR2V5	PLANE	COPPER	0,017	595900	4	0		Yes							
	DIELECTRIC	FR-4	0,12	0	4,2	0,035									
9 GND	PLANE	COPPER	0,017	595900	4	0,035		Yes							
	DIELECTRIC	FR-4	0,12	0	3,8	0,035									
10 DIFF3	CONDUCTOR	COPPER	0,017	595900	4	0			0,085	50	EDGE	0,17	101,26		
	DIELECTRIC	FR-4	0,12	0	4,2	0,035									
11 GND	PLANE	COPPER	0,017	595900	4	0		Yes							
	DIELECTRIC	FR-4	0,08	0	3,8	0,035									
BOTTOM	CONDUCTOR	COPPER	0,035	595900	4	0			0,093	50	EDGE	0,15	100,32		
	SURFACE	AIR		0	1	0									

Total Thickness: 1.6 MM