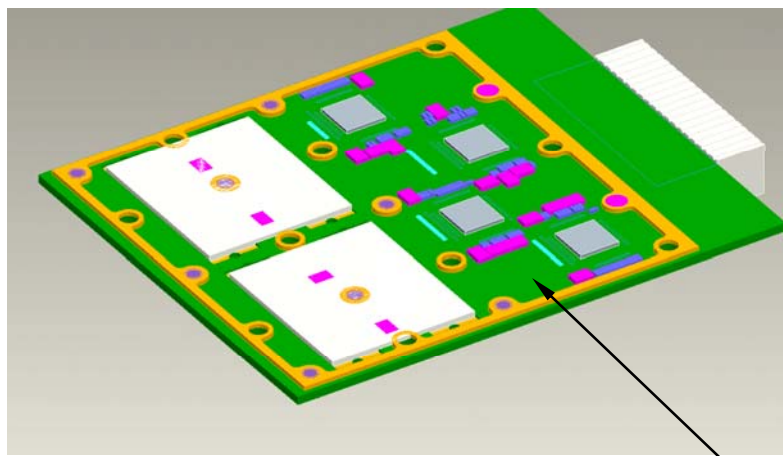
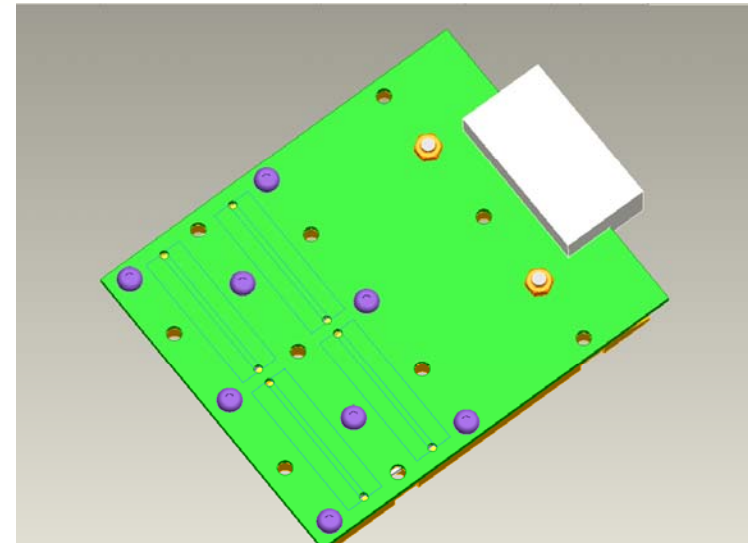
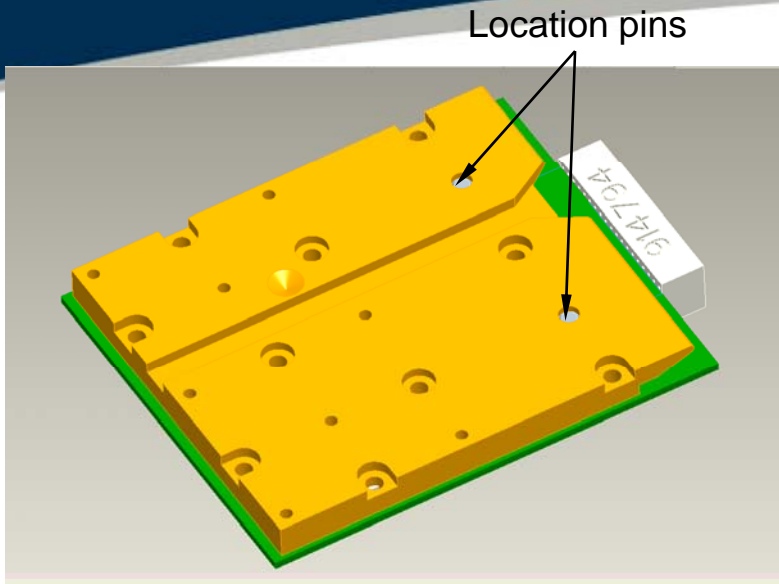


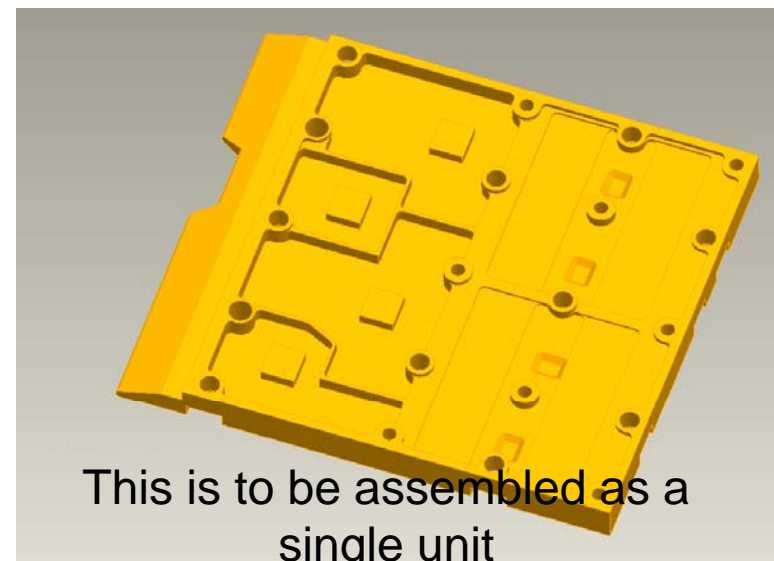




# AIDA



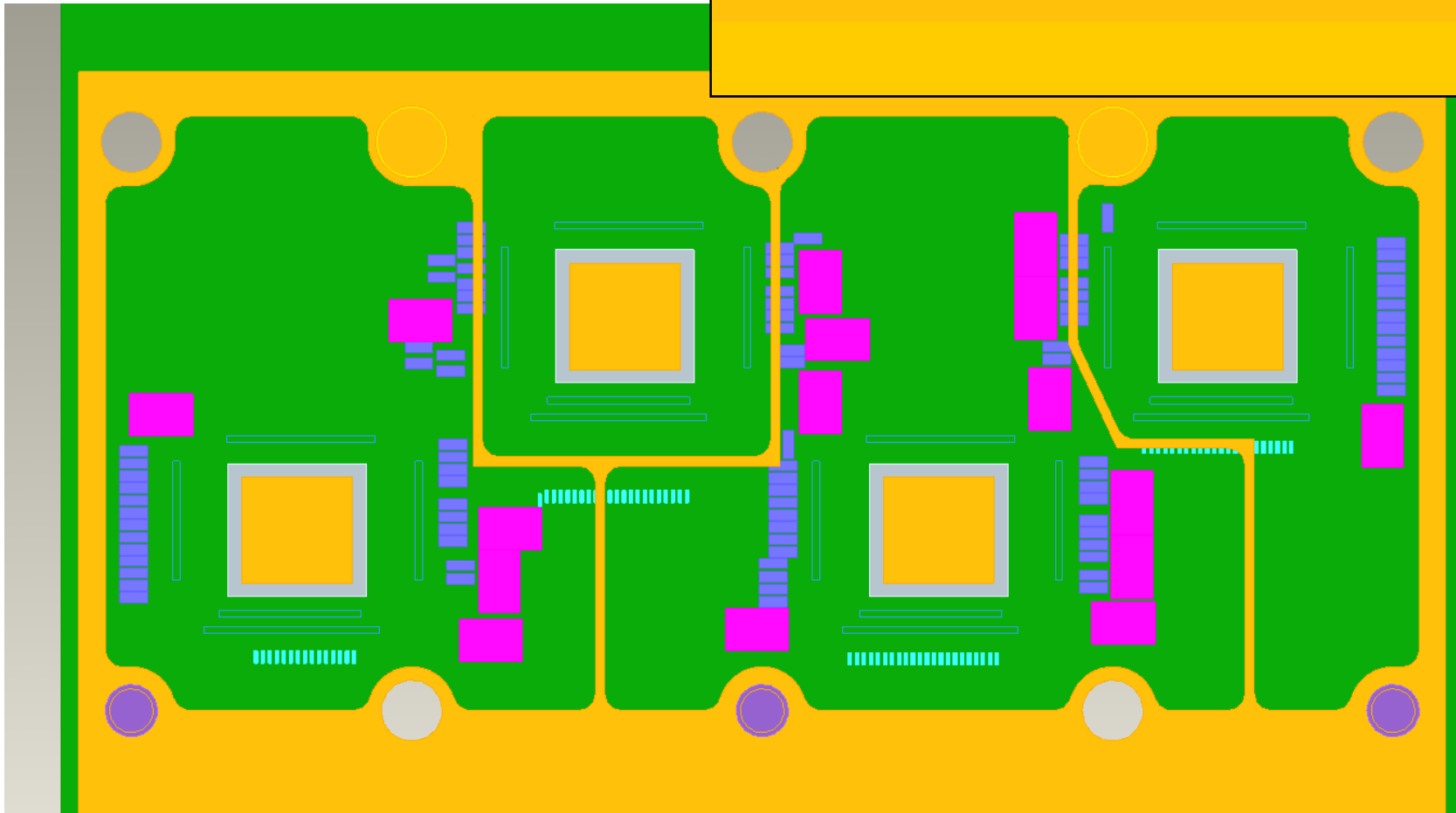
Light-tight area



This is to be assembled as a  
single unit



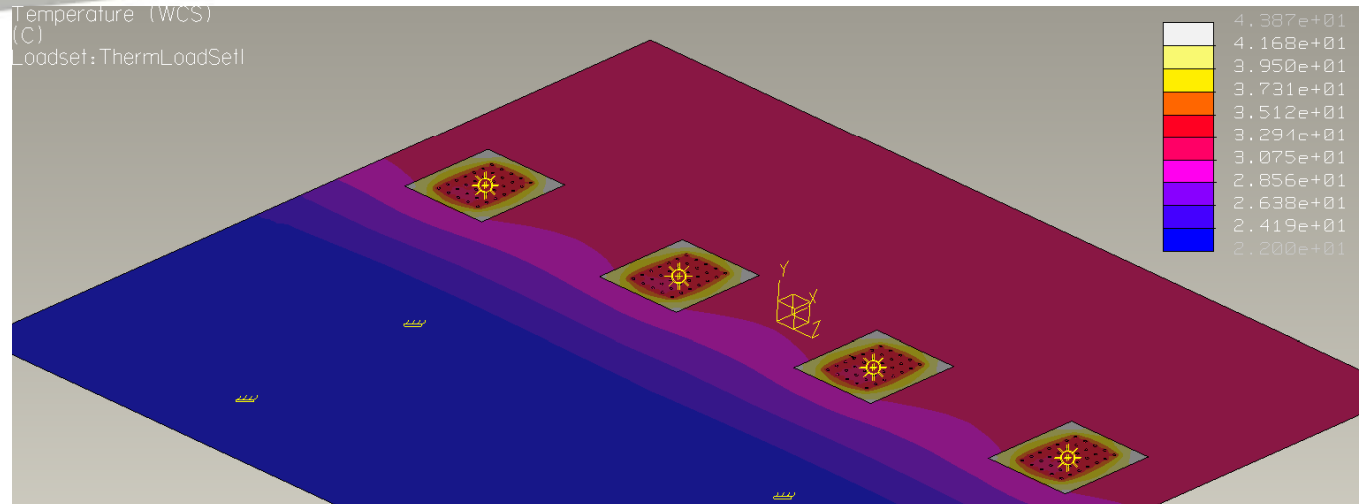
# AIDA





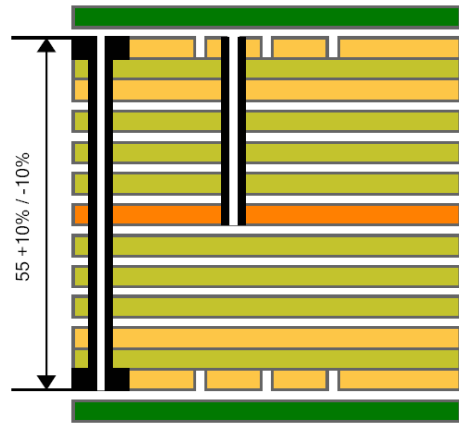
Max temp 44°C

Still have remainder of  
thermal path to consider



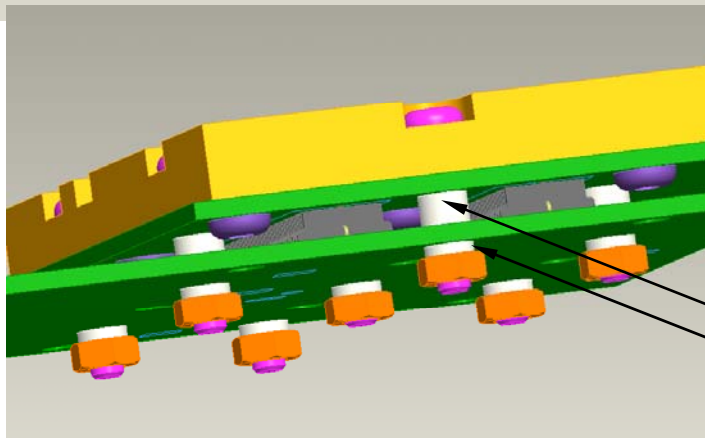
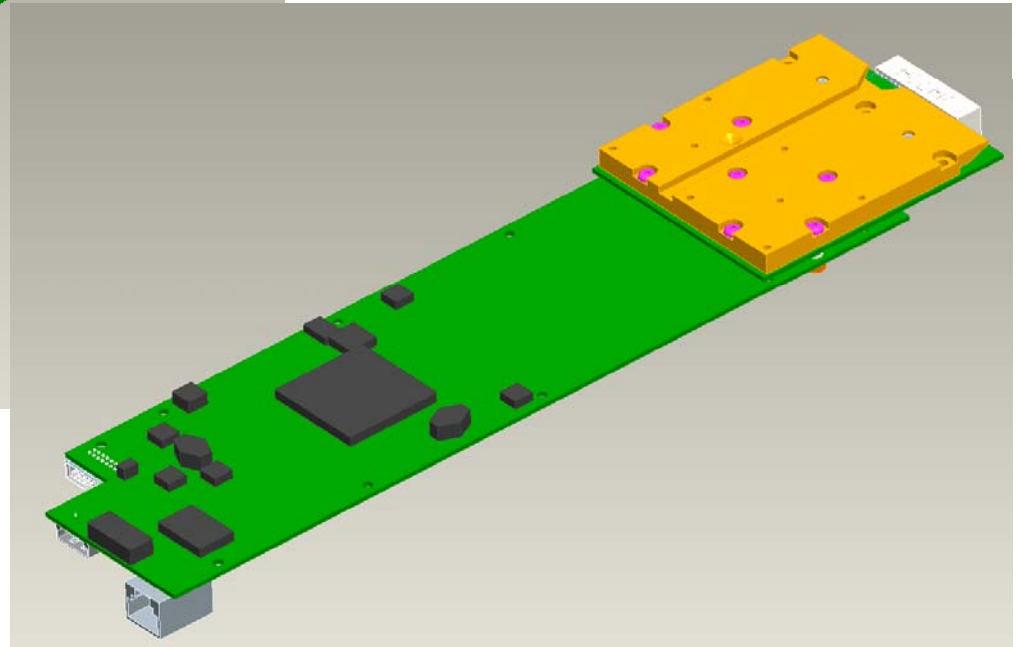
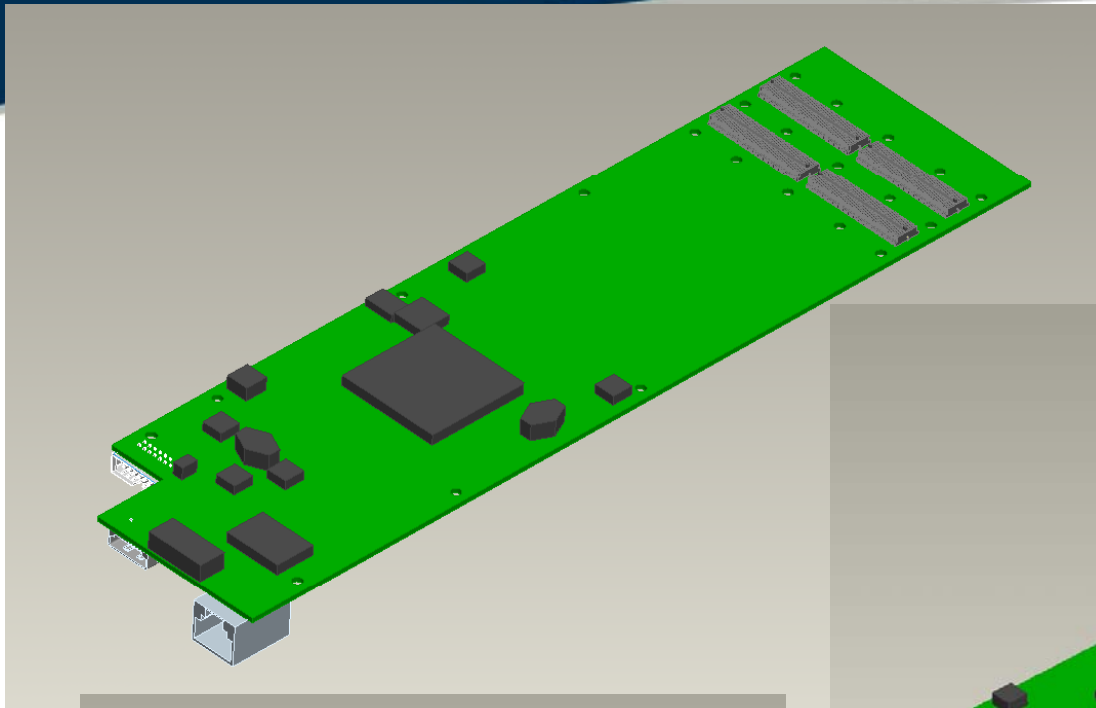
C:\Program Files\Polar\Speedstack\Smiths Nuclear Physics AIDA\_PCB\_6layers\_ver2.stk

Layer	Stack up	Supplier Description	Description	Stock Number	Base Thickness	Finish Thickness	εr	Imp
1			Soldermask				3.200	
2		0.203mm	STDFR4-LF		0.700	1.400	4.200	
3		49N	49N-1080 noflow		2.760	2.760	4.200	
4		49N	49N-1080 noflow		2.760	2.760	4.200	
5		49N	49N-1080 noflow		2.760	2.760	4.200	
6		Copper Core	Copper		16.000	16.000		
7		STDFR4-LF	STD1080		2.560	2.560	4.200	
8		STDFR4-LF	STD1080		2.560	2.560	4.200	
9		STDFR4-LF	STD1080		2.560	2.560	4.200	
10		0.203mm	STDFR4-LF		0.700	0.700	4.200	
11			Soldermask		0.700	1.400		





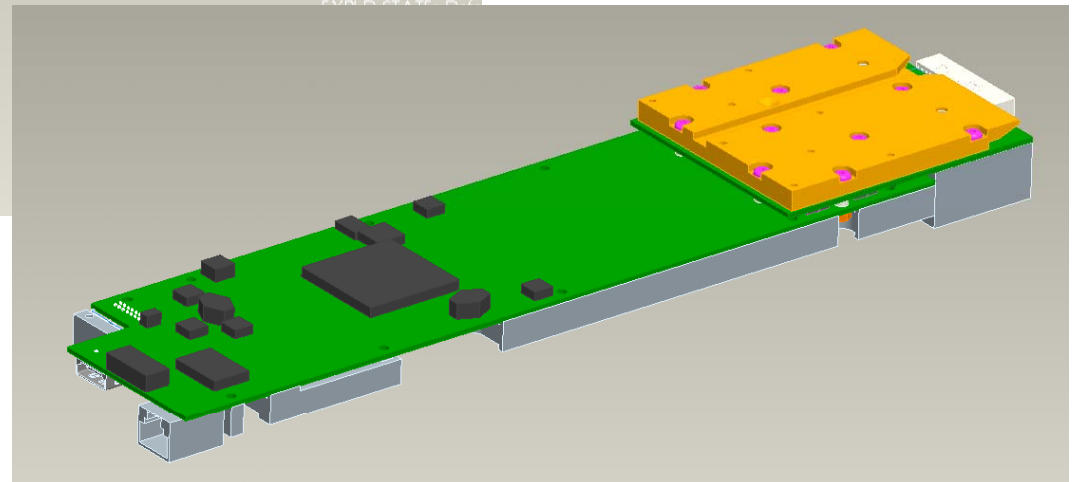
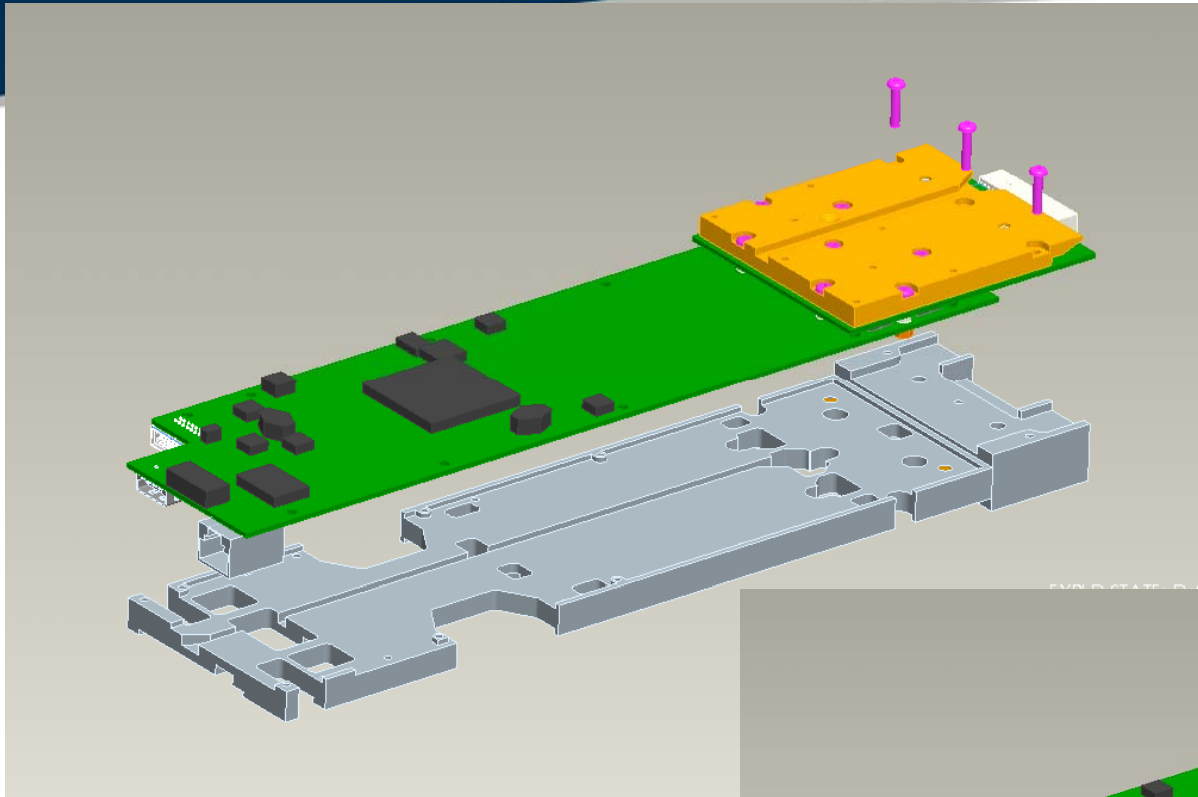
# AIDA

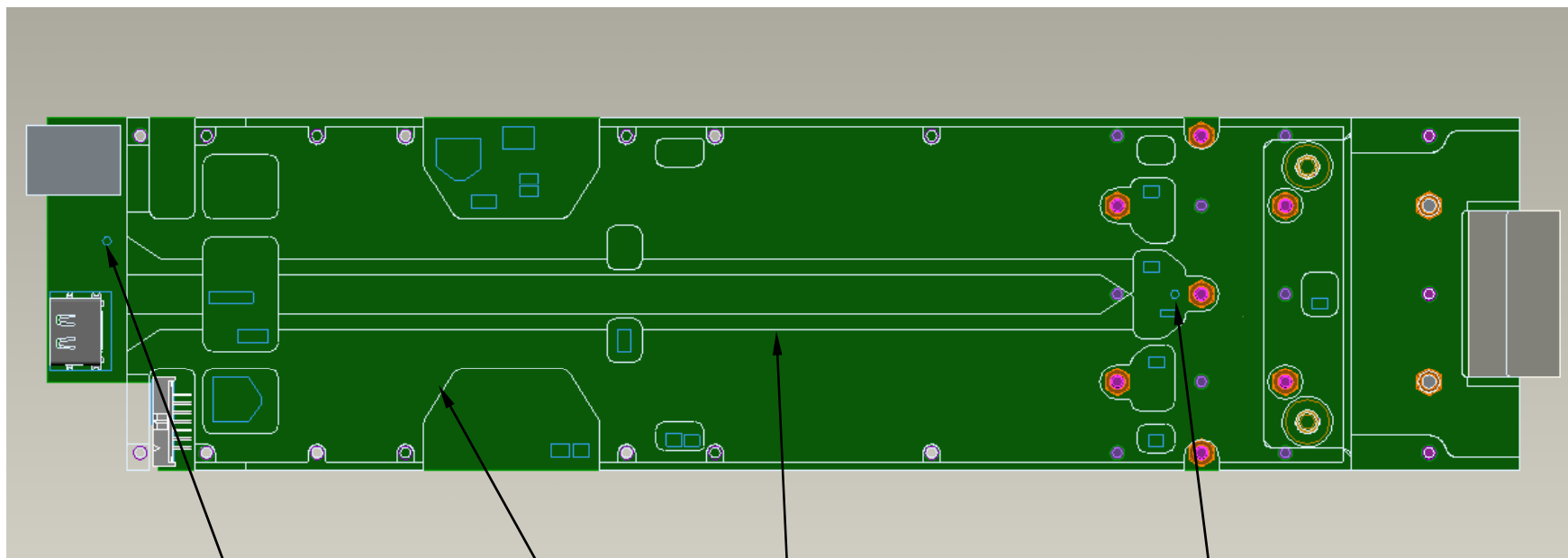


3mm thick spacers  
Undersize washers



# AIDA





Wire start

Pockets cut through spacer

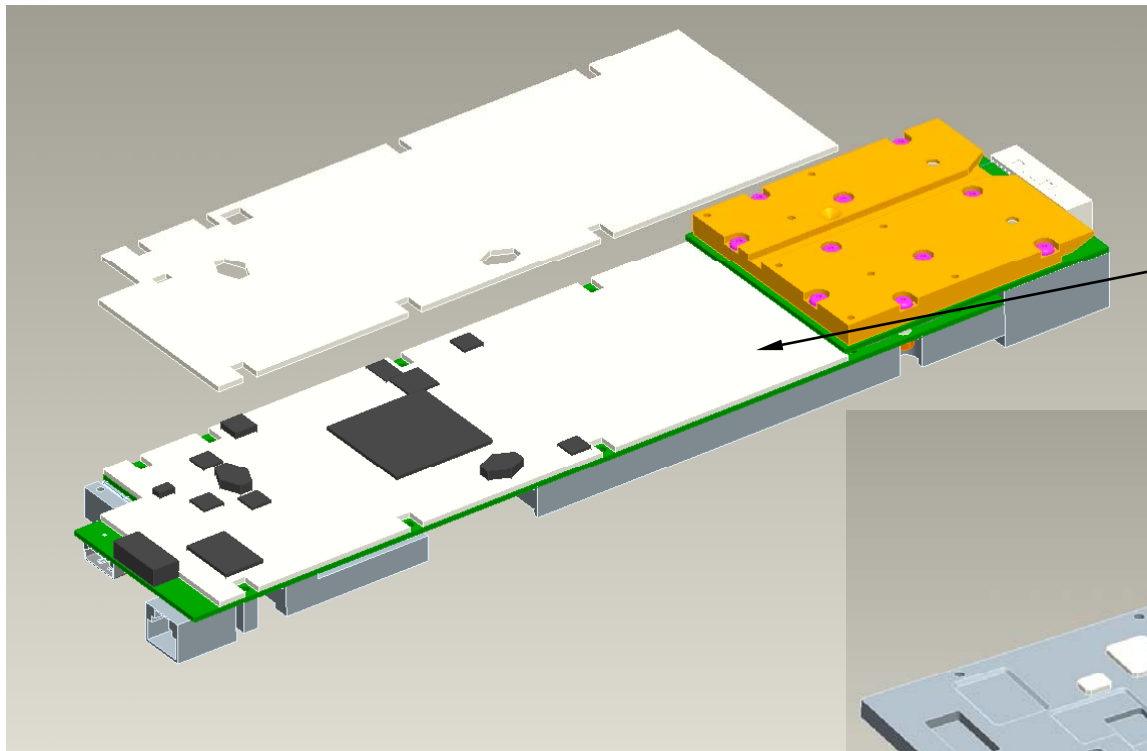
Channel for wire

Wire end

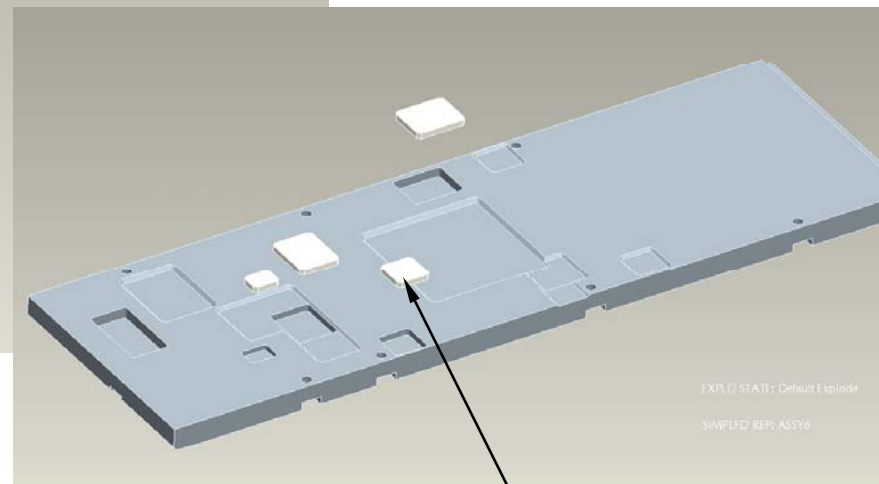




# AIDA



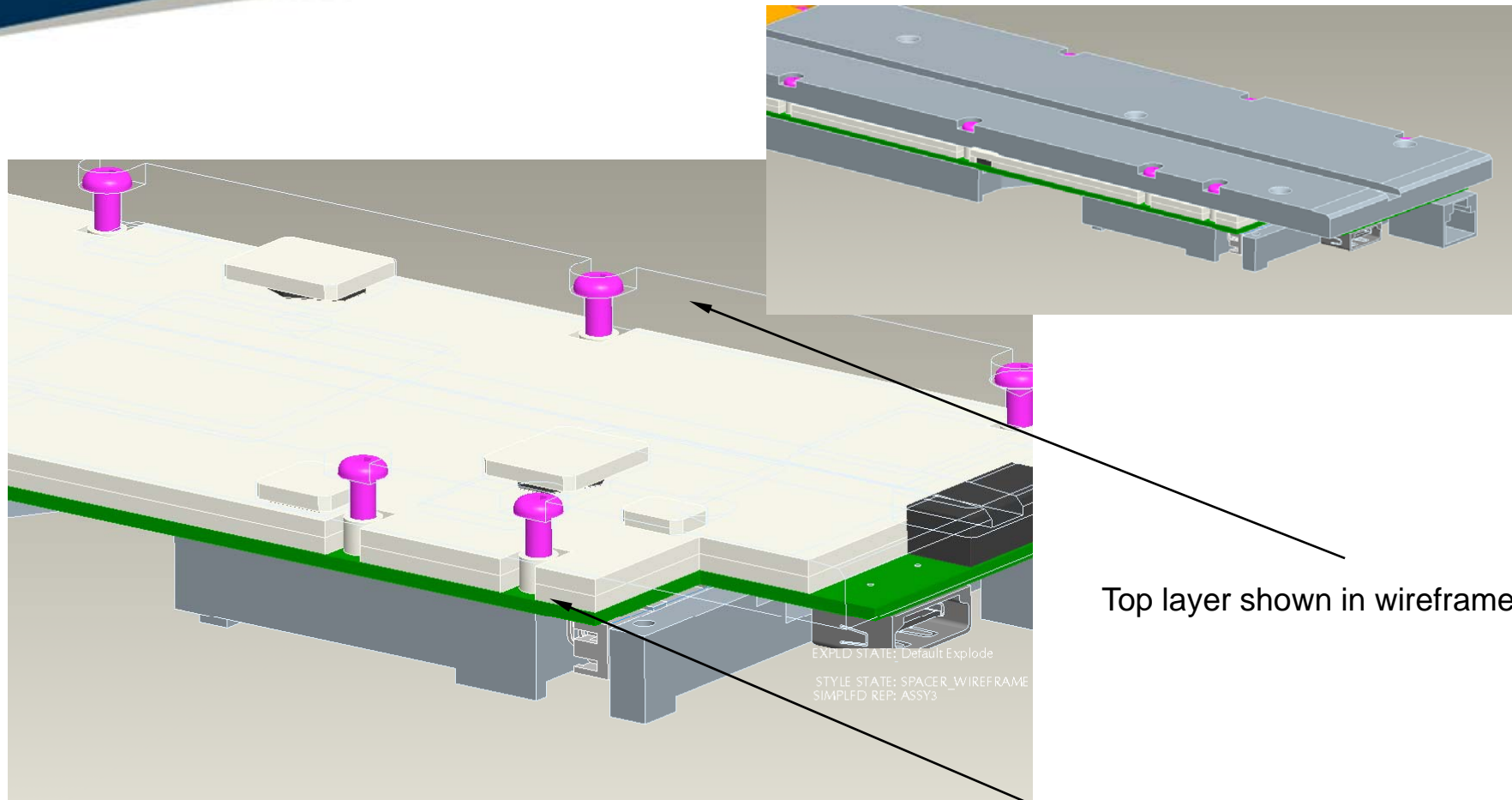
2 layers of foam applied to FEE64  
card



Foam applied to top plate



# AIDA



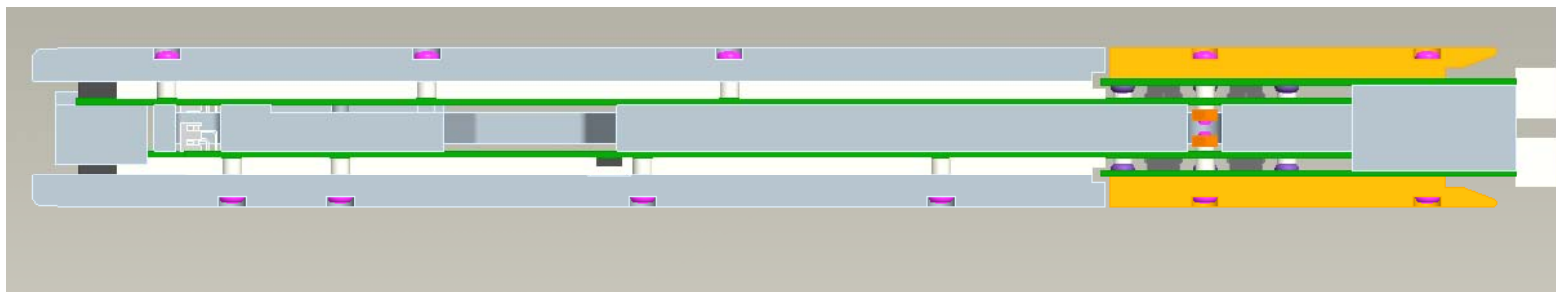
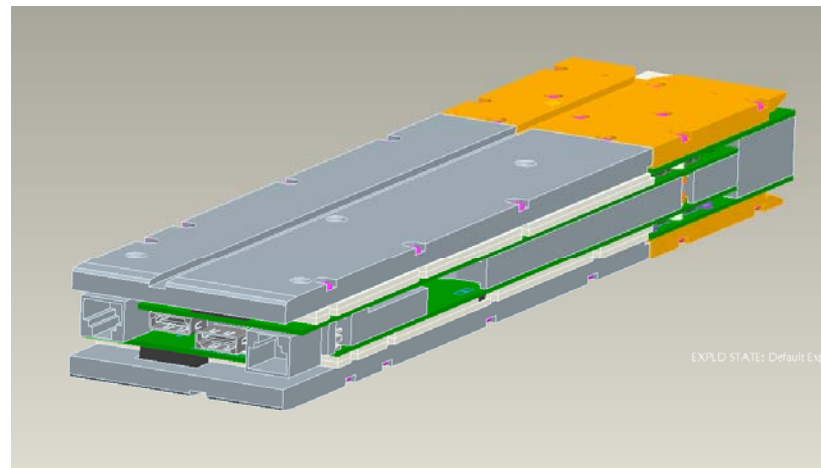
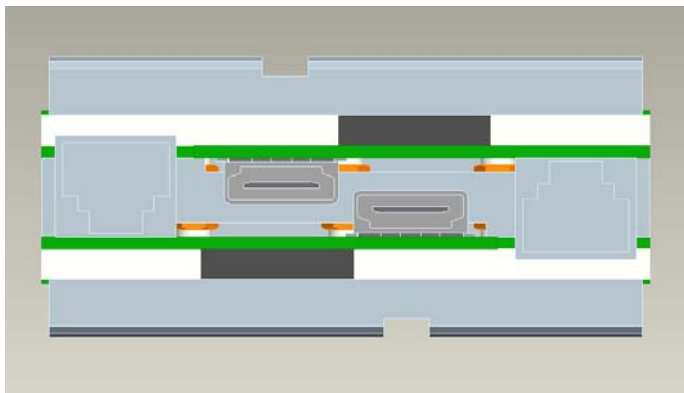
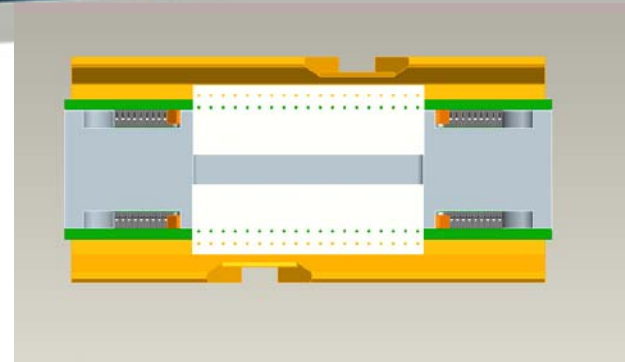
Top layer shown in wireframe

4mm spacers

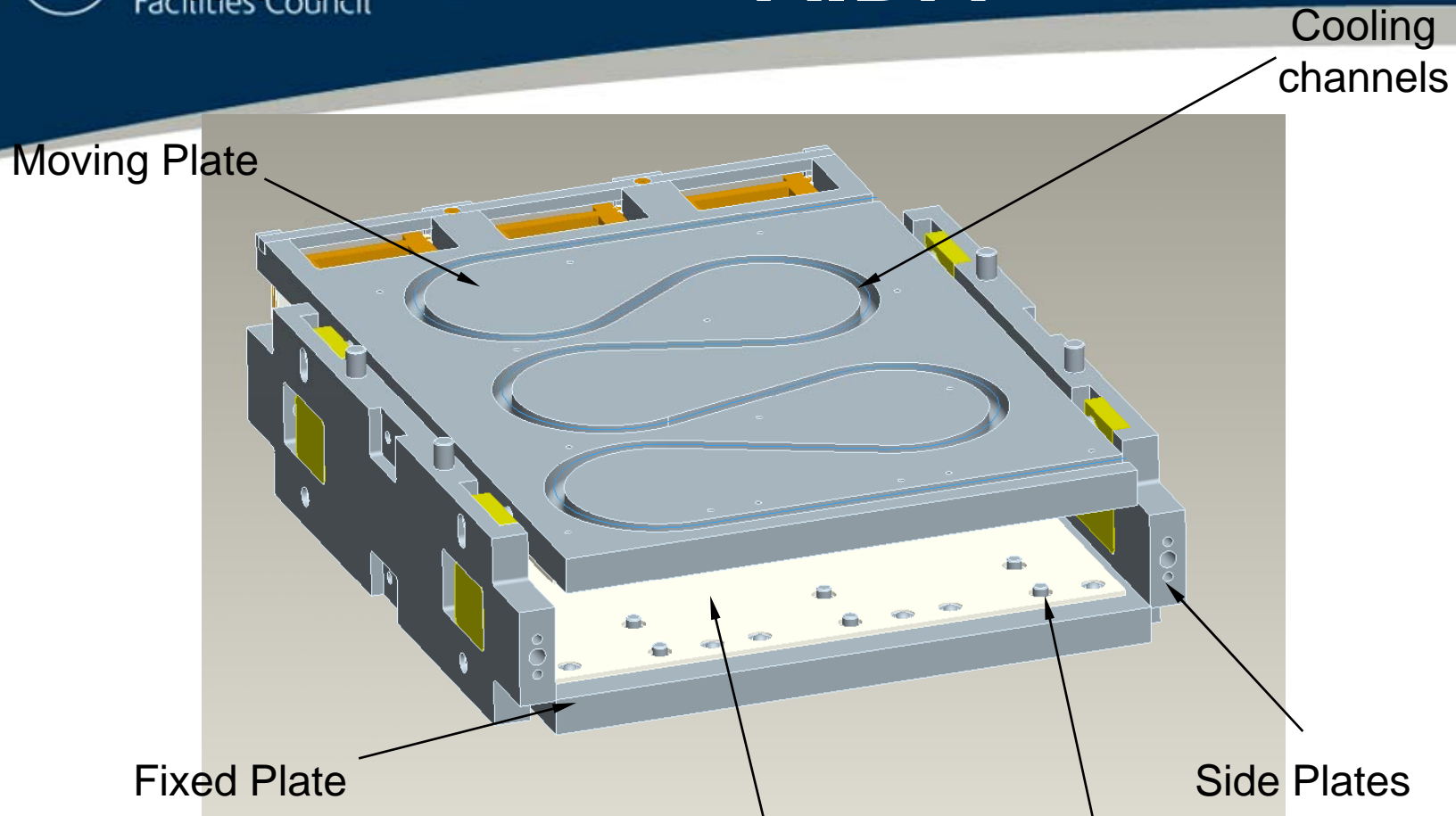
1 layer of uncompressed foam is 2.2mm 10



## Views of Electronics Module



# AIDA



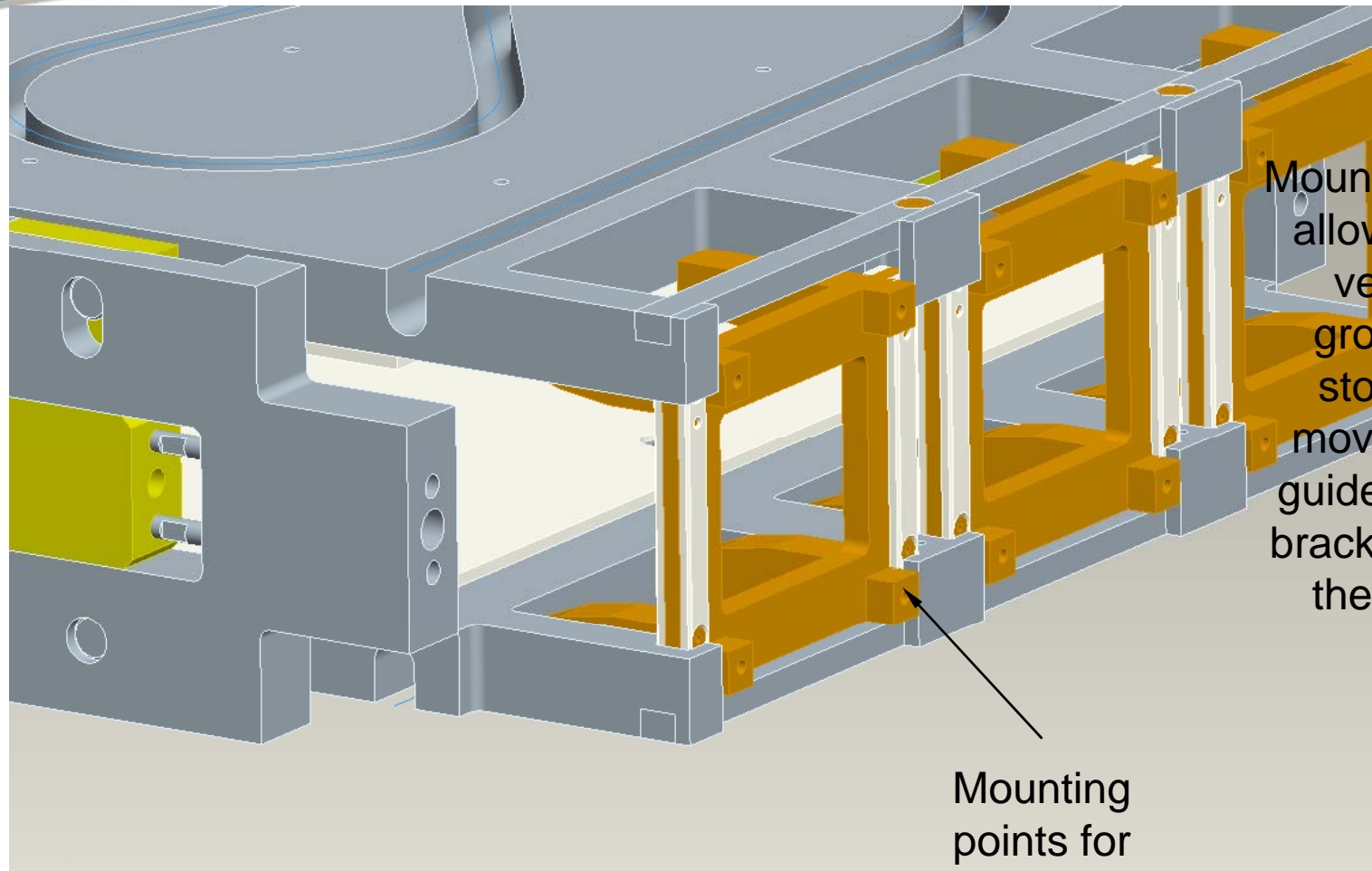
Mechanics consists of 5 main parts  
Moving plate, Fixed plate, 2 side  
plates and board guide plates

Dow Corning  
type foam

Guide Pins



# AIDA

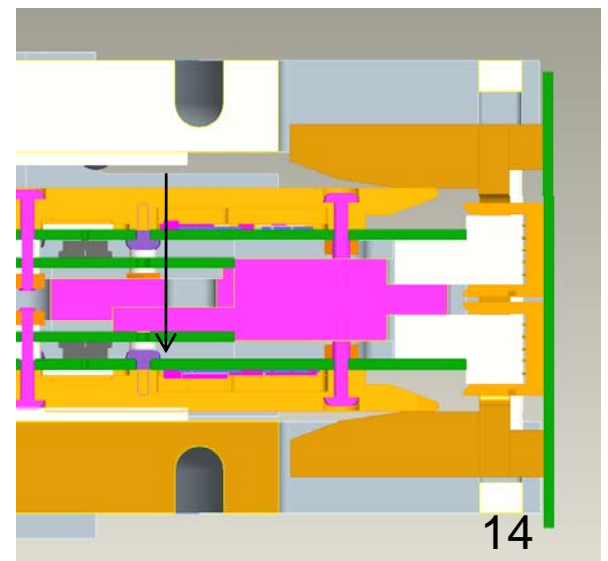
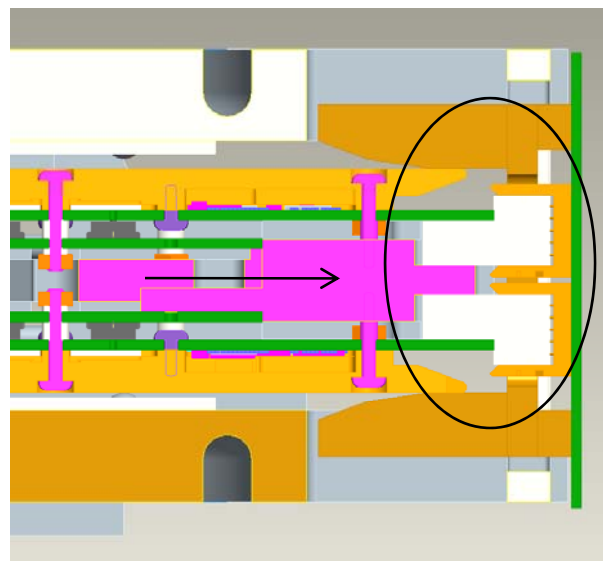
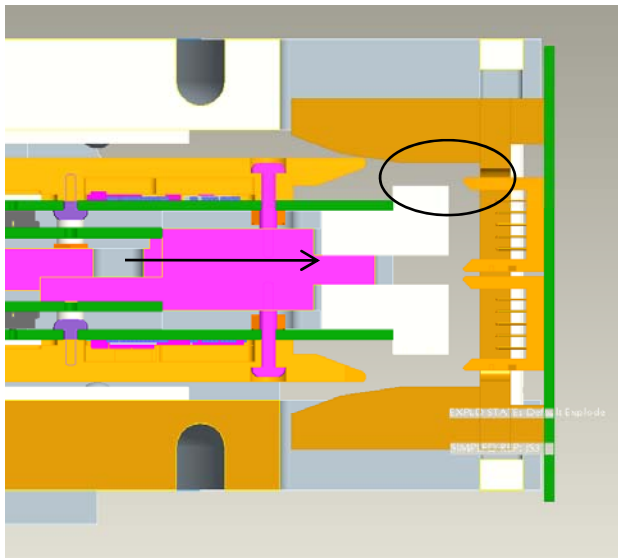
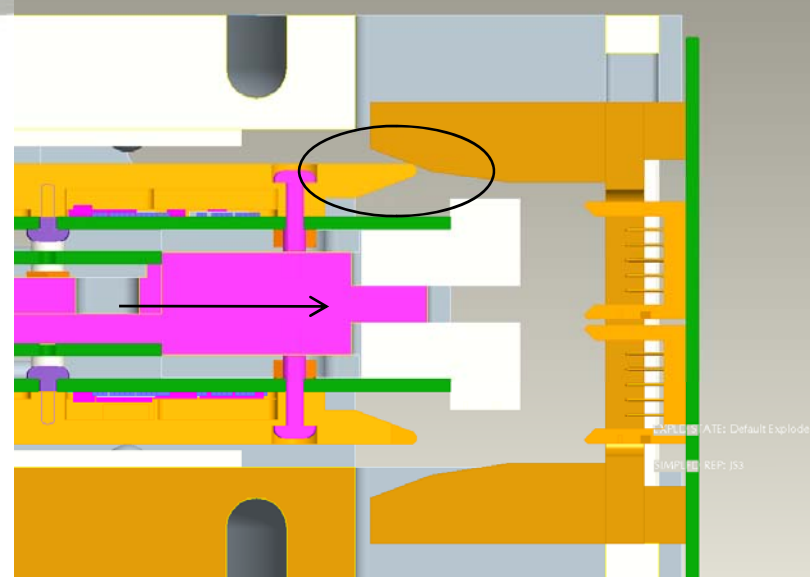
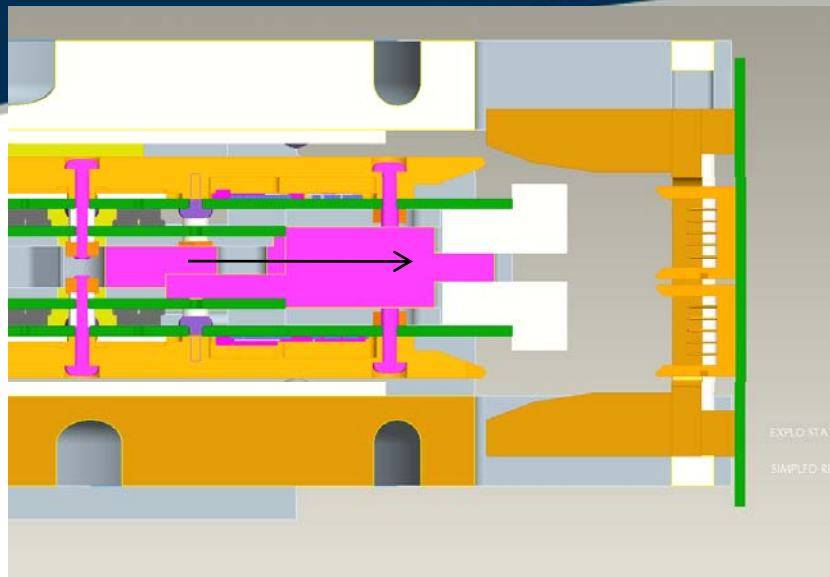


Mounting brackets allowed to slide vertically in grooves. End stops restrict movement, and guides locate the bracket relative to the heat sink.

Mounting points for Intermediate cards



# AIDA

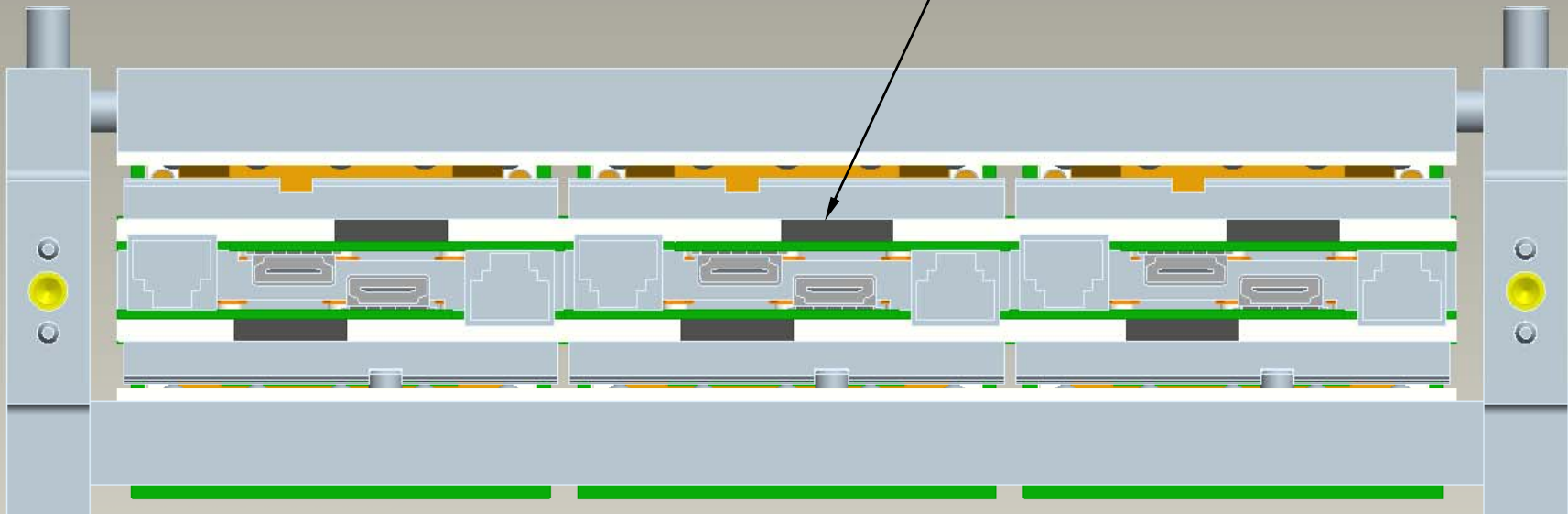






# AIDA

FEE64  
Module

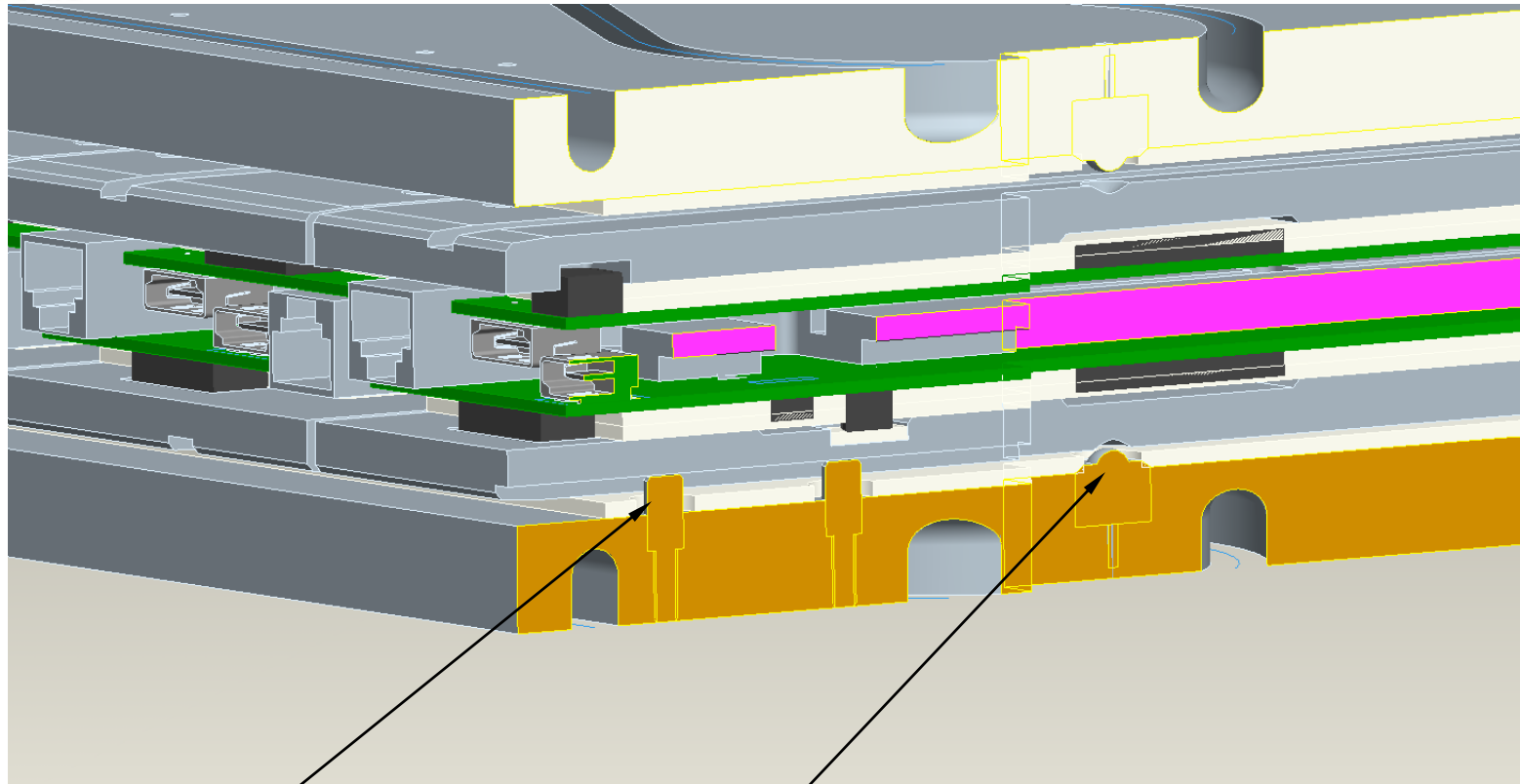


FEE64 board and mezzanine card 80mm wide.

Spacer plate 80mm wide, Top and bottom currently 78.



# AIDA



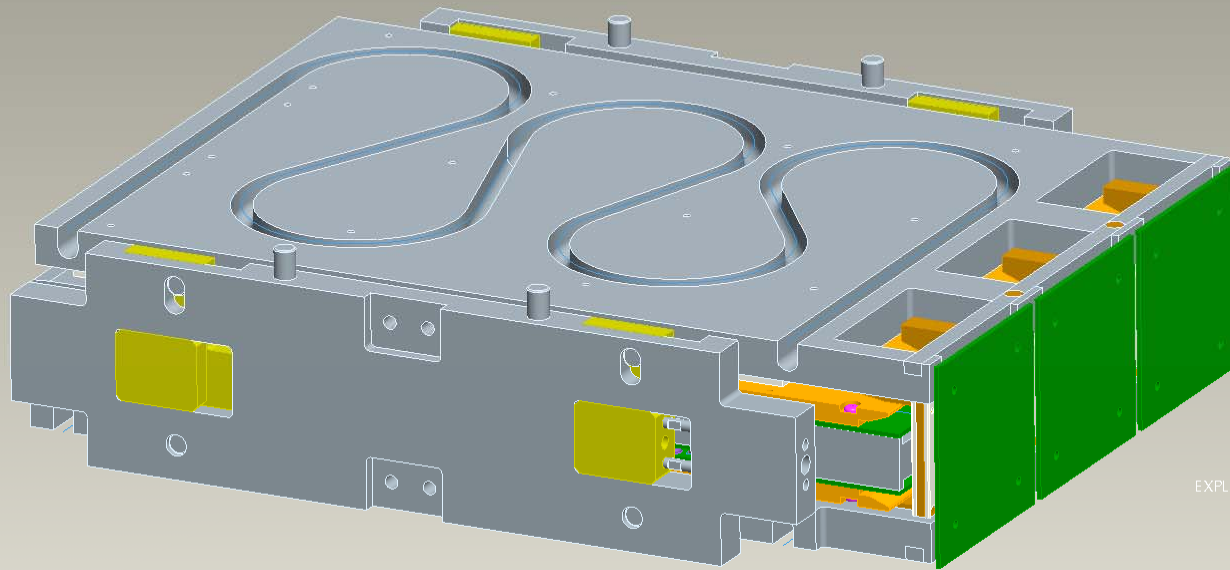
Guide pin uses  
groove in top plate

Allways balls drop  
into cone when fully  
inserted

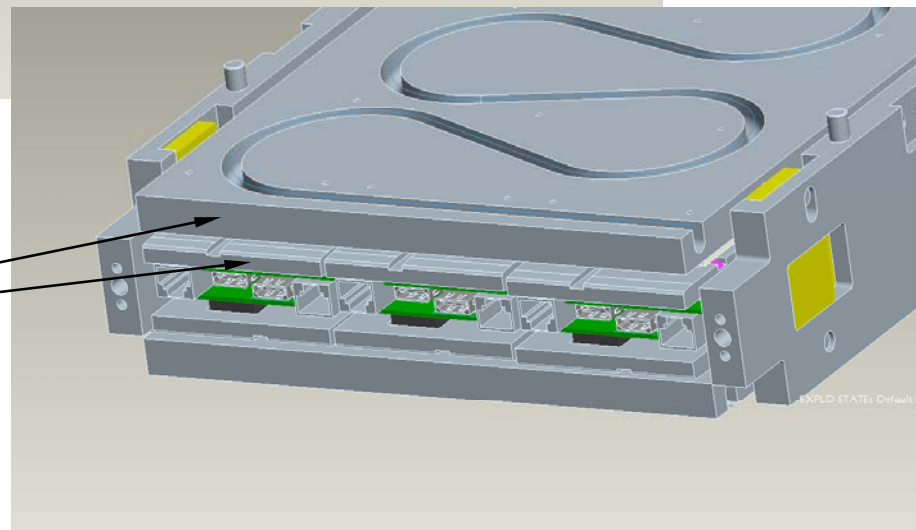




# AIDA



EXPLD STATE: Default



Holes to be added  
here to allow for  
push/pull lever to be  
added