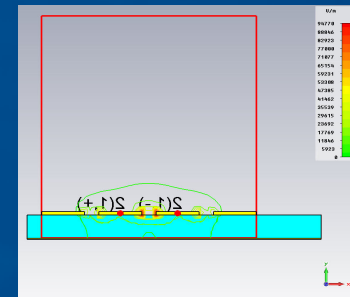
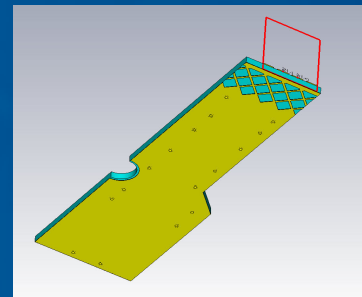
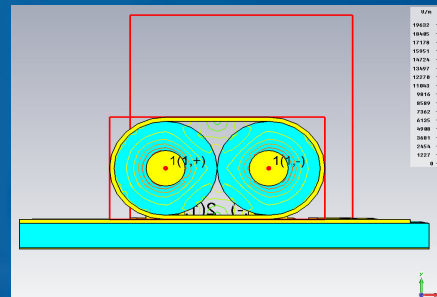
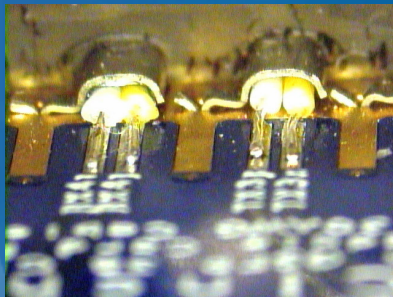




SC-10

# Cinch High Speed Cables

- Cinch New FDR/EDR Cables
  - Cinch PairShield™ & Extended Ground Bus Technologies Proven Vital For Upcoming FDR/EDR
  - Cinch New FDR/EDR Paddle Card
  - Cinch New EDR Cable Characteristics

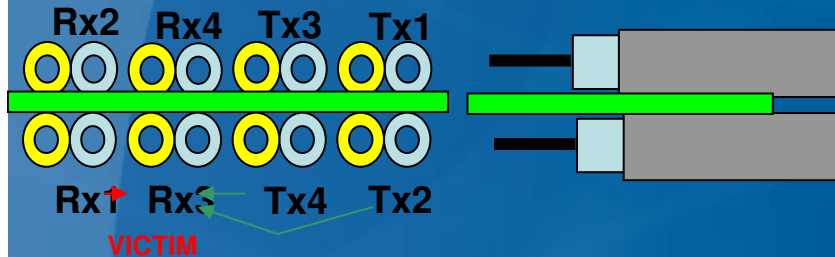




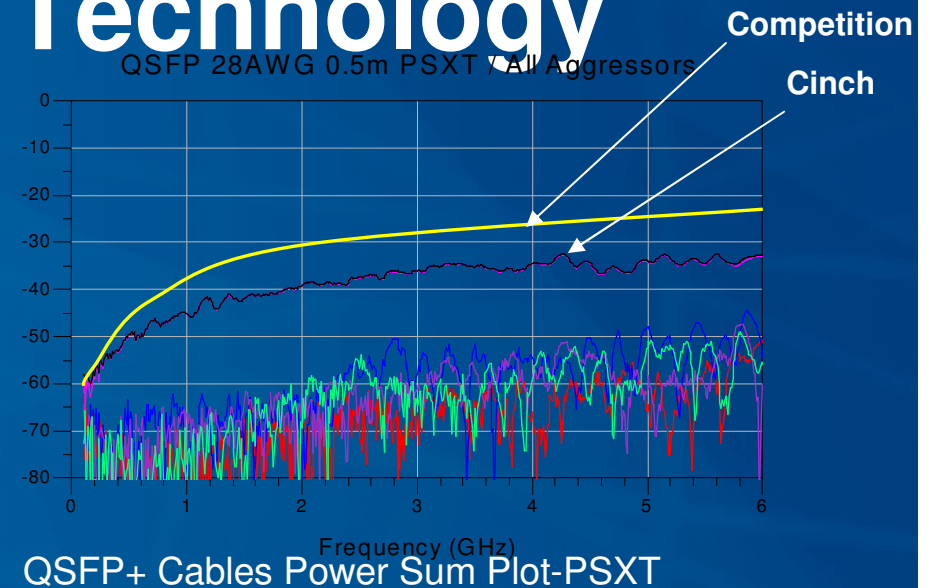
SC-10

# Cinch QSFP+ Extended Ground & PairShield Technology

*The extended Paddle card Ground Plane virtually eliminates crosstalk from all cross card aggressors*

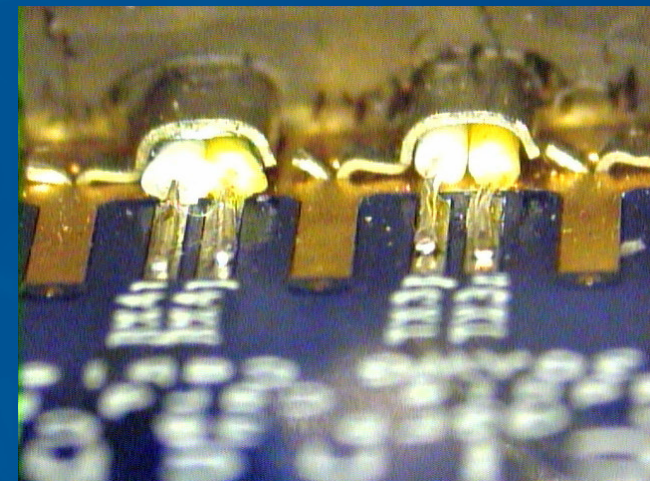


-PSXT  
-RX4FEXT  
-RX2FEXT  
-RX1FEXT  
-TX4NEXT  
-TX3NEXT



## Cinch PairShield<sup>TM</sup> Ground Clips

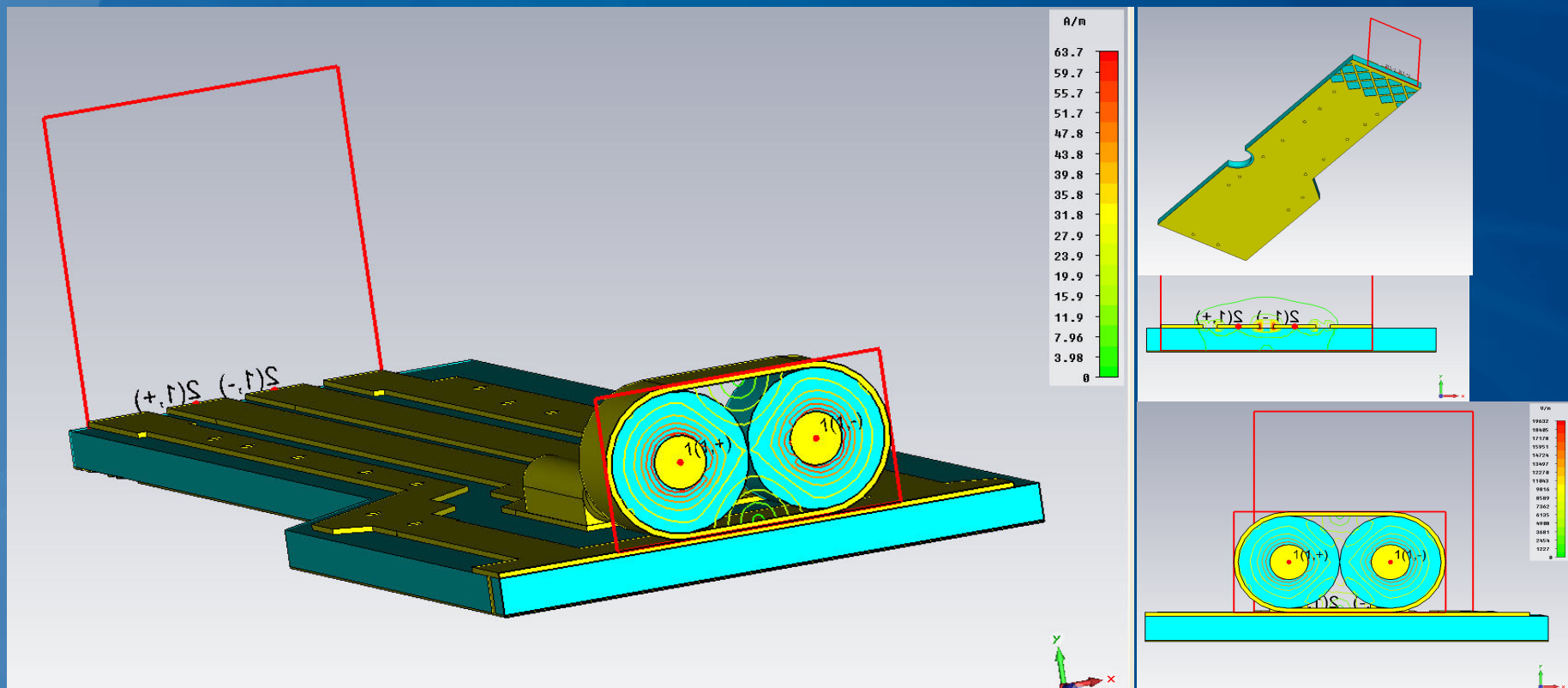
- Recovers Shield lost during Cable Prep.
- Reduces Cross Talk to Minimum
- Maintains Impedance Continuity



# Cinch FDR/EDR Paddle Card

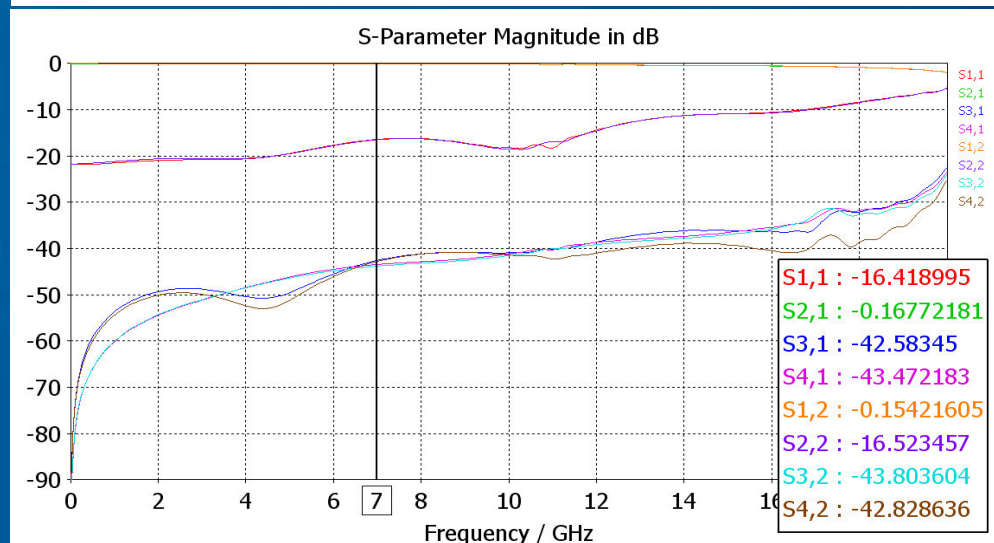
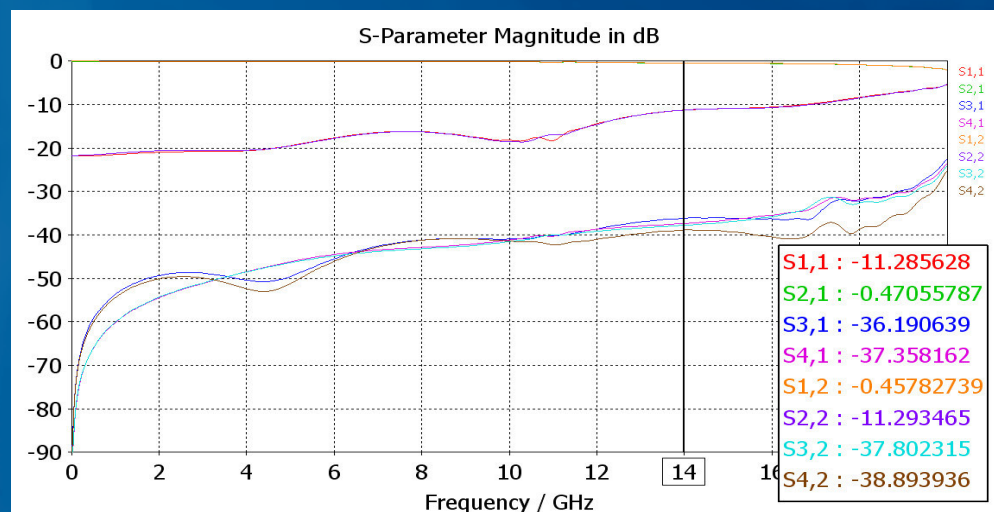
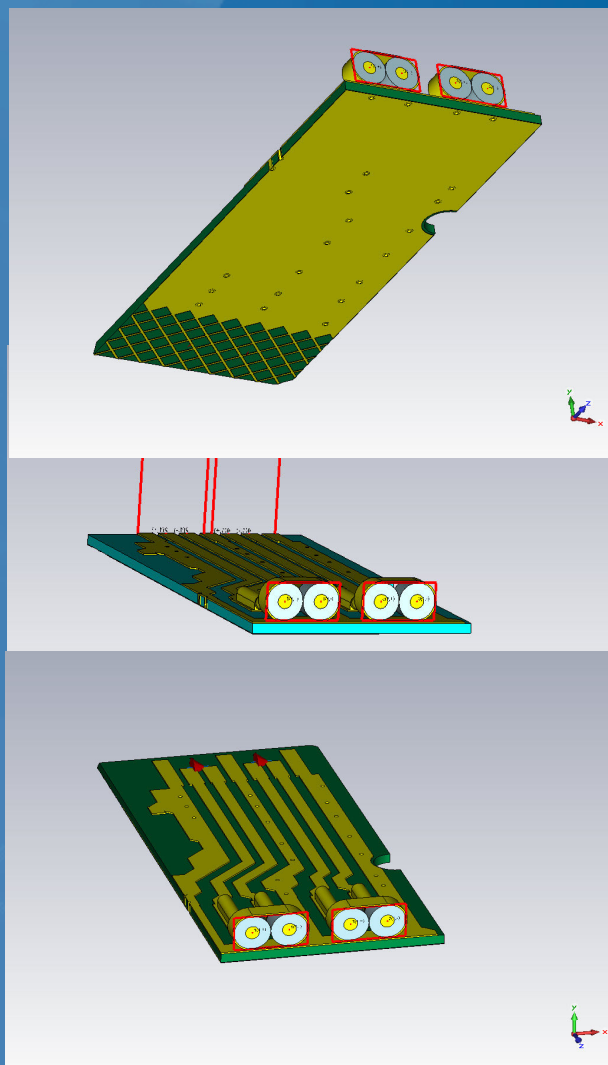
## Cinch FDR/EDR Paddle Card Characteristics

- Optimized current QSFP+ Paddle Card Material and Trace Geometry to meet FDR/EDR performance objectives



Optimized FDR/EDR Paddle Card

# Cinch FDR/EDR Paddle Card



**Dual Channel, Single Side - Optimized FDR/EDR Paddle Card**



# Cinch FDR/EDR Paddle Card

## Cinch FDR/EDR Paddle Card Characteristics

•Current QSFP+ vs. FDR/EDR terminated Paddle card Simulation results

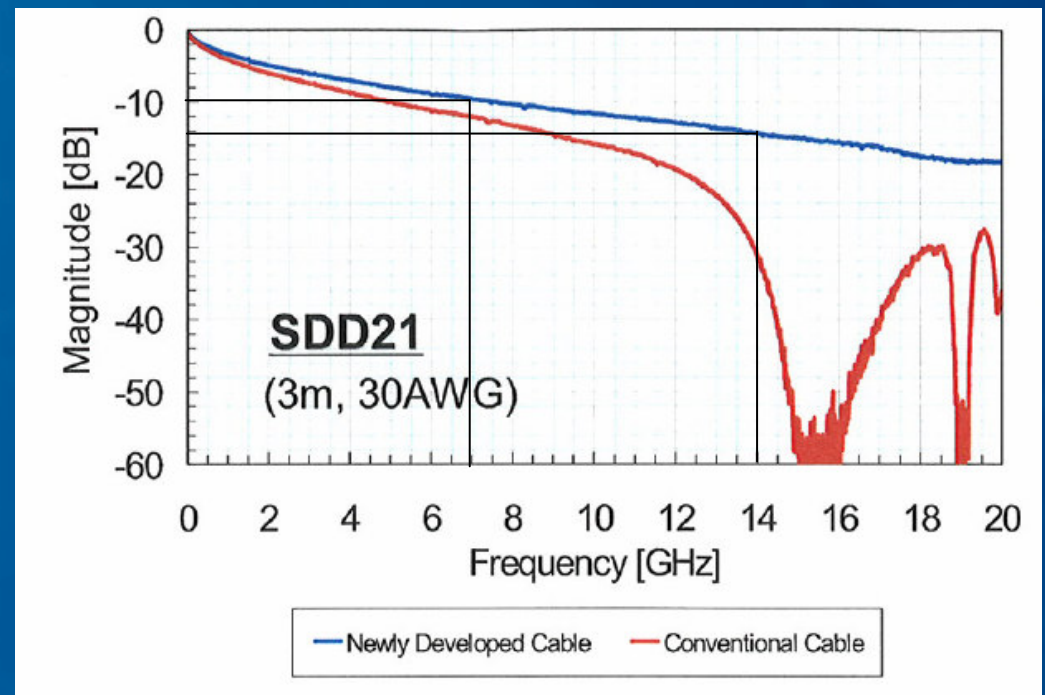
S Parameter	Current QSFP+ @ 7 GHz	Current QSFP+ @ 14 GHz	New FDR Card @ 7 GHz	New EDR Card @ 14 GHz
IL	-1 dB	-2 dB	-0.16 dB	-0.47 dB
RL	-15 dB	-6 dB	-16.4 dB	-11.3 dB
NEXT	-36 dB	-25 dB	-42 dB	-36.2 dB

# Cinch FDR/EDR Cable

## Cinch New FDR/EDR Cable Characteristics

### 30 AWG, 3m cable

- In Pair Skew < 6 p.s./m
- Insertion Loss < 14dB/3m EDR
- Insertion Loss < 10dB/3m FDR
- Suck Out Free > 20 GHz



**Cinch FDR and EDR Cables will be  
Available for your Testing In  
March Of 2011**

**Thank You For Attending**