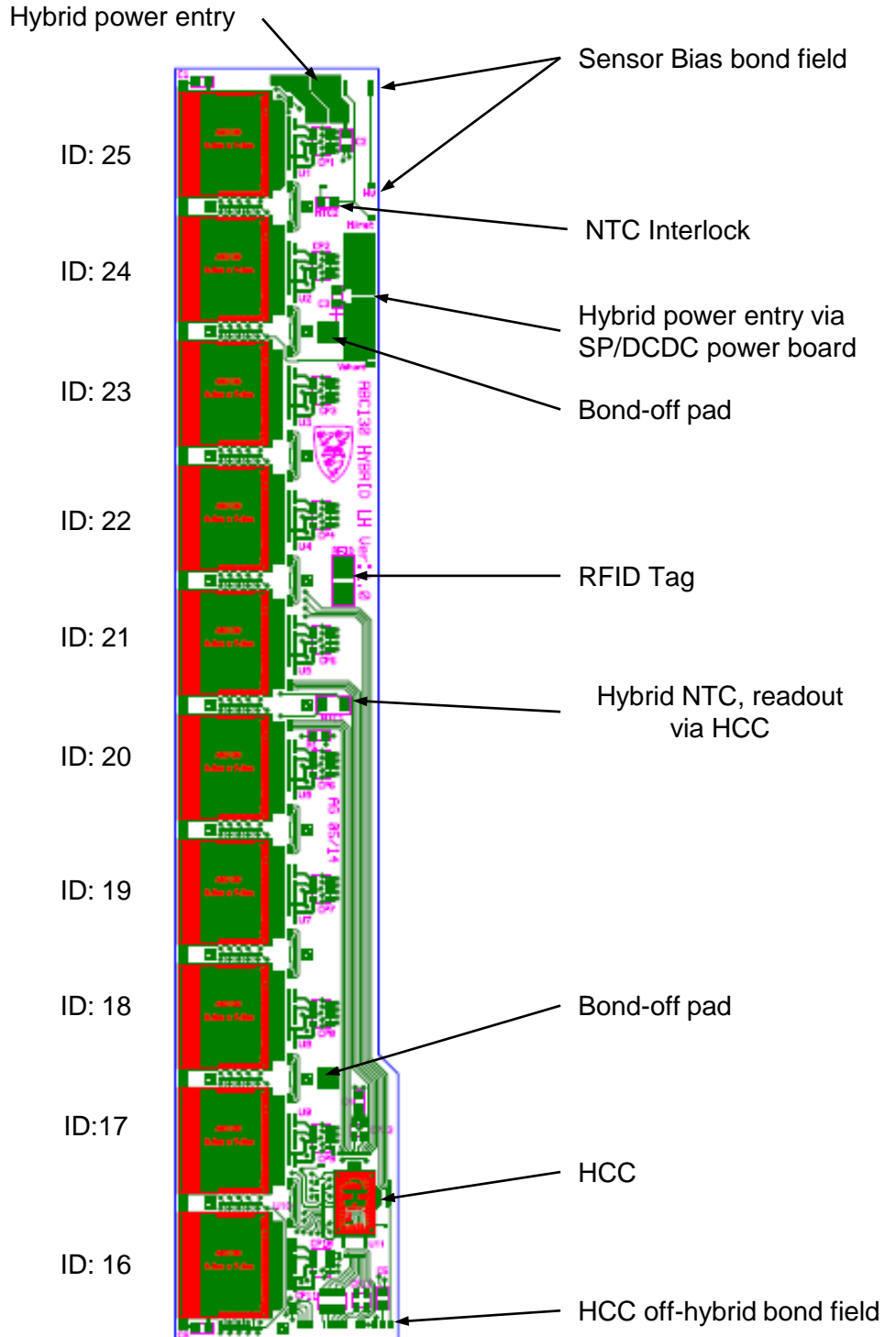


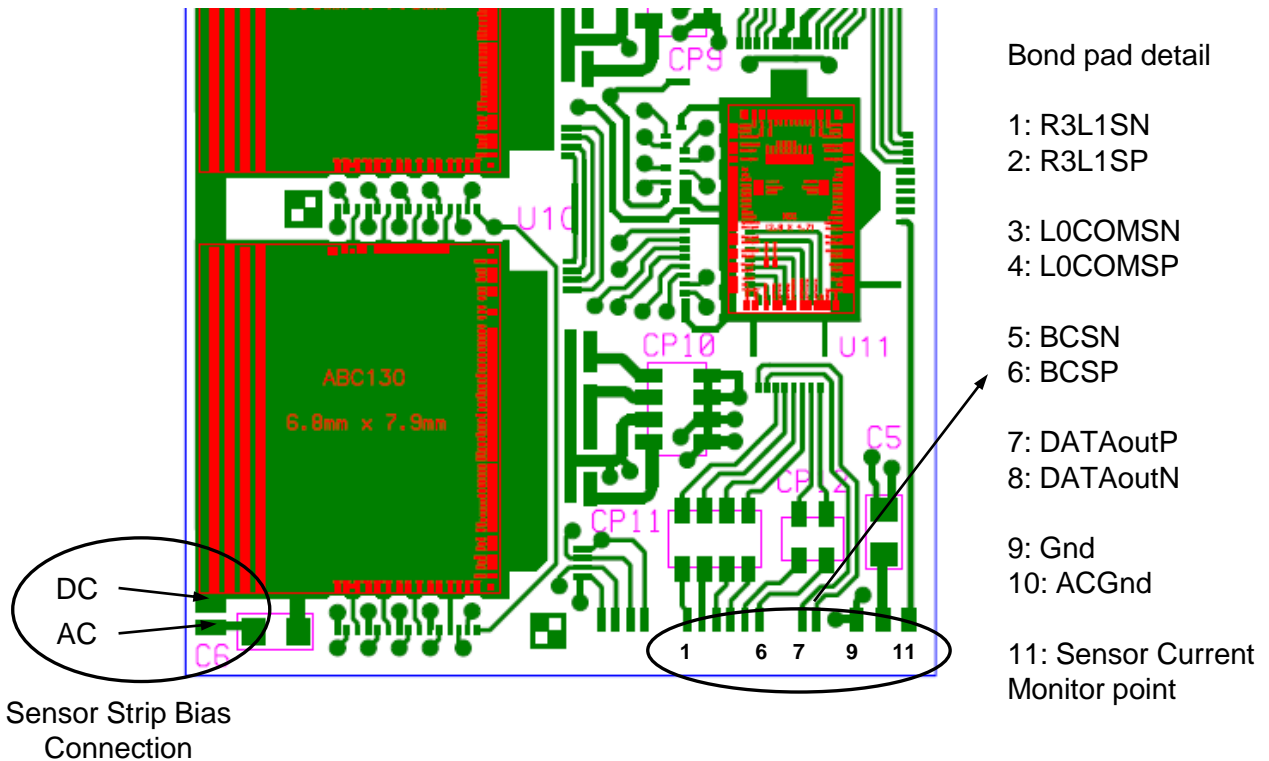
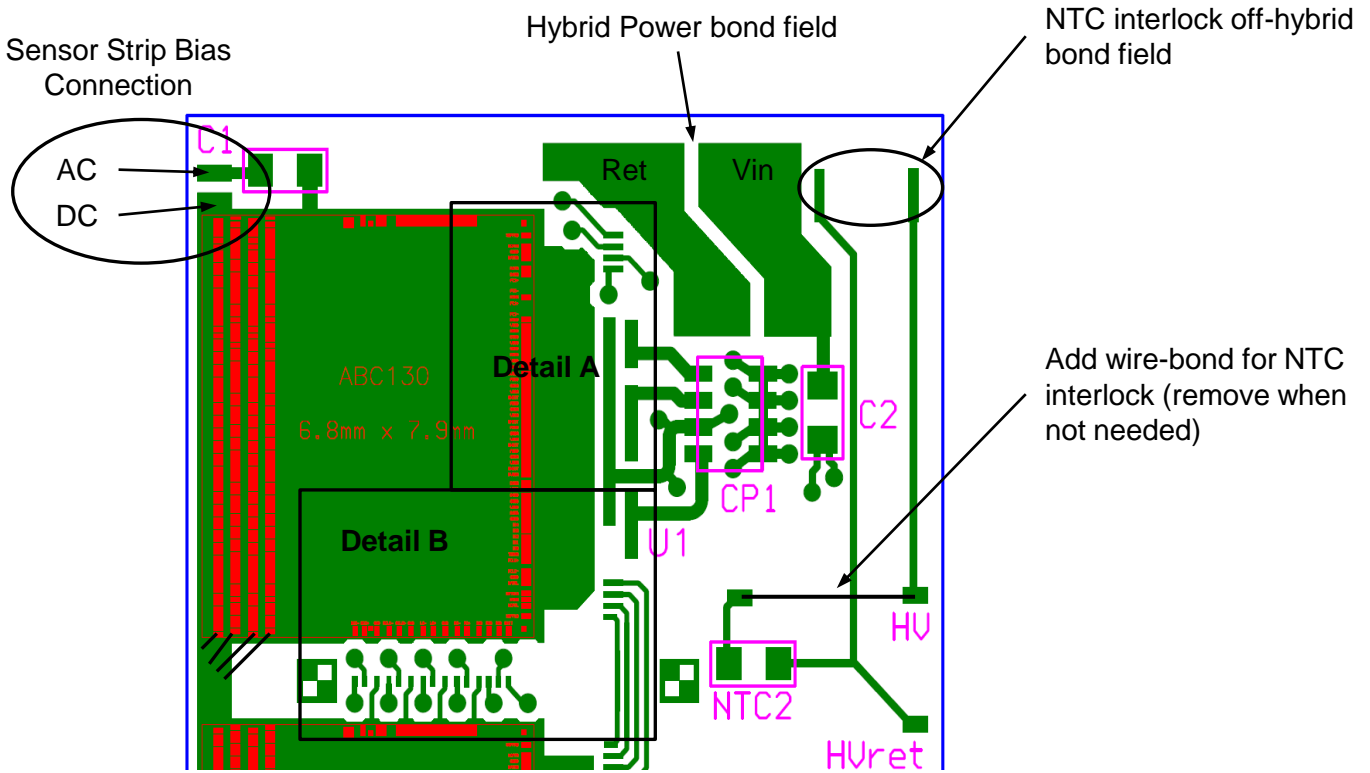
# ABC130 Hybrid LH Ver: 1.0 Wire-bonding and Connection detail

Designed for 10 x ABC130s which connect up to a single HCC (for data I/O and monitoring). The readout topology is based on two groups of five ABC130s (ID16 to ID20 and ID21 to ID25), with bi-directional readout, connecting up to the HCC.

There is also the ability to bypass the HCC, to provide readout of a single column of 10 x ABC130s (see page 5).

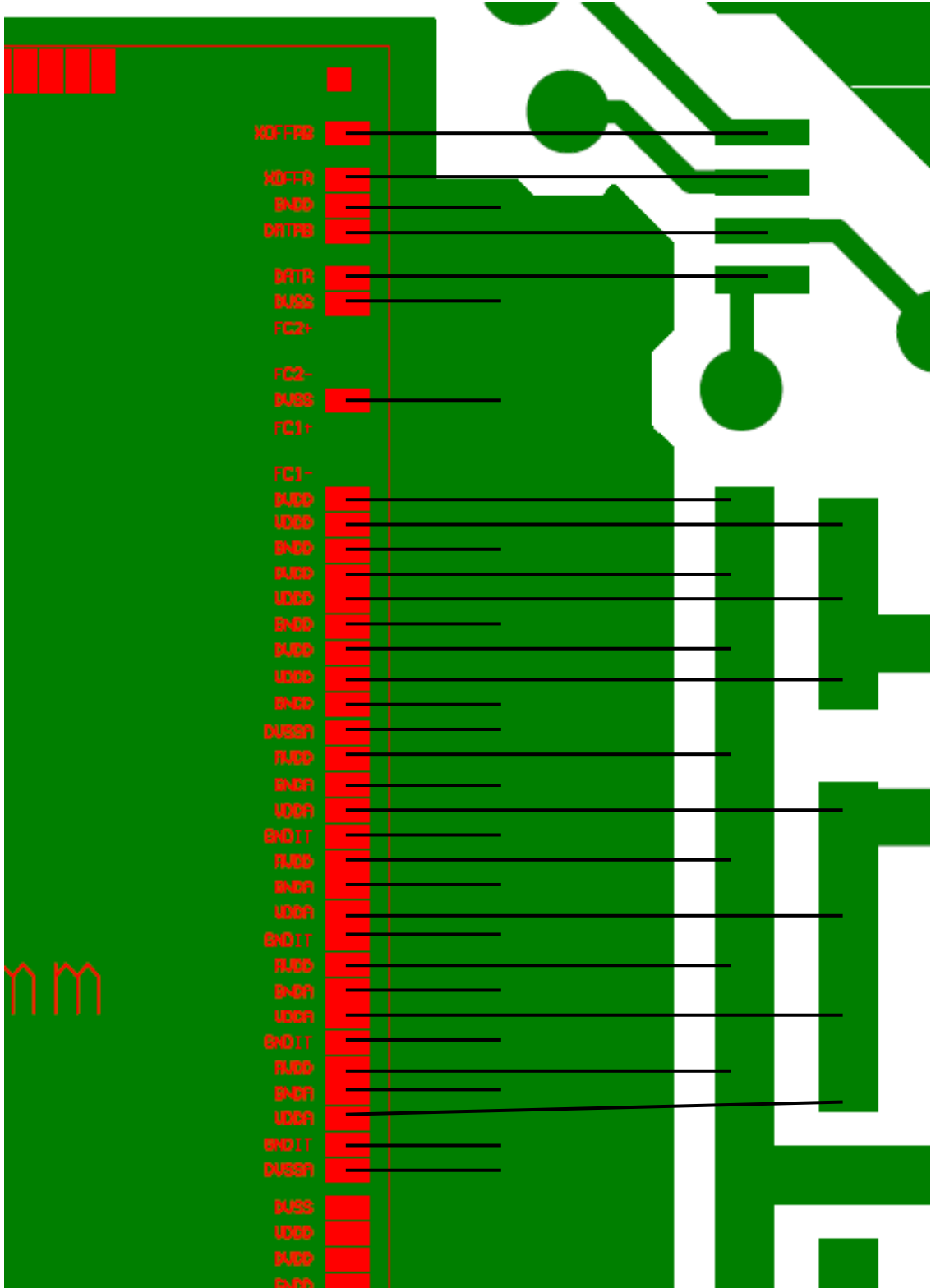


# Power entry and Hybrid I/O detail



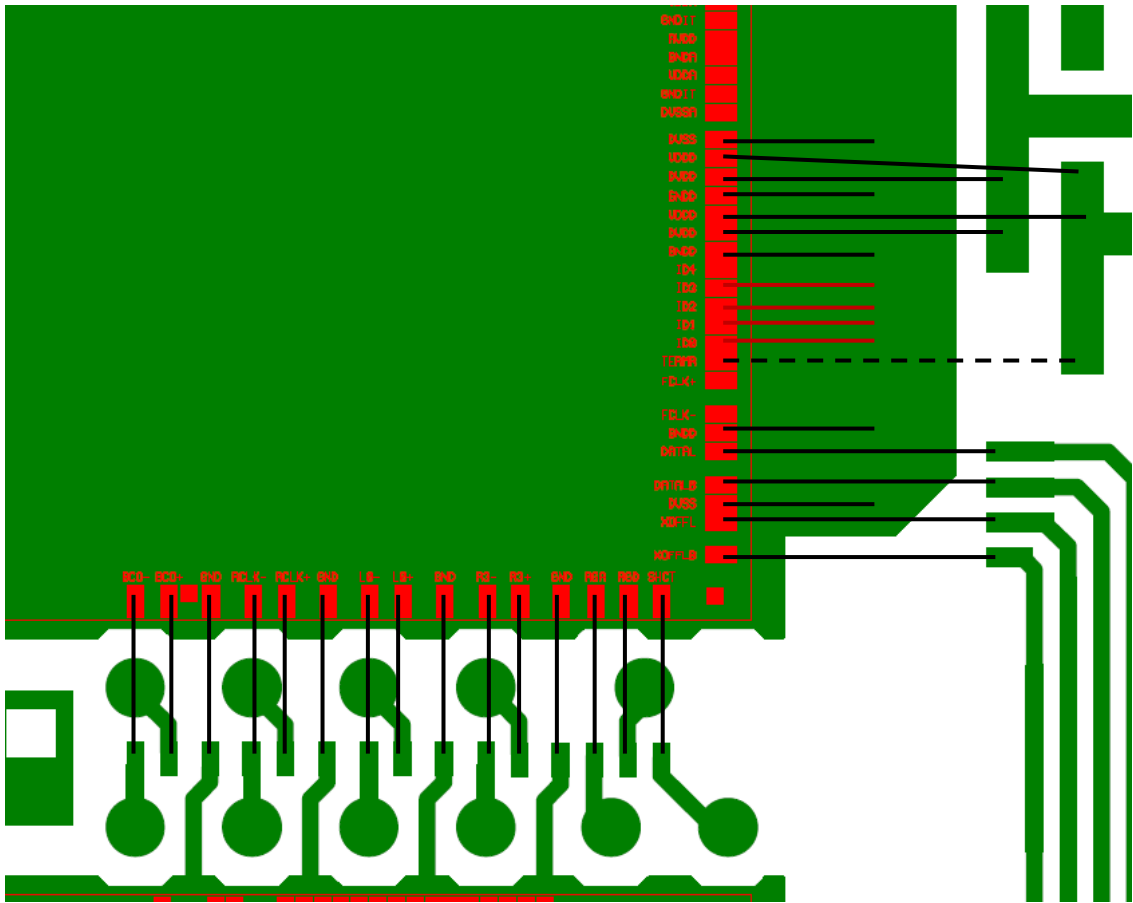
# ABC130 bond detail – identical for ALL asics except for ChipID and TERMR

Detail A



# ABC130 bond detail cont'd

## Detail B



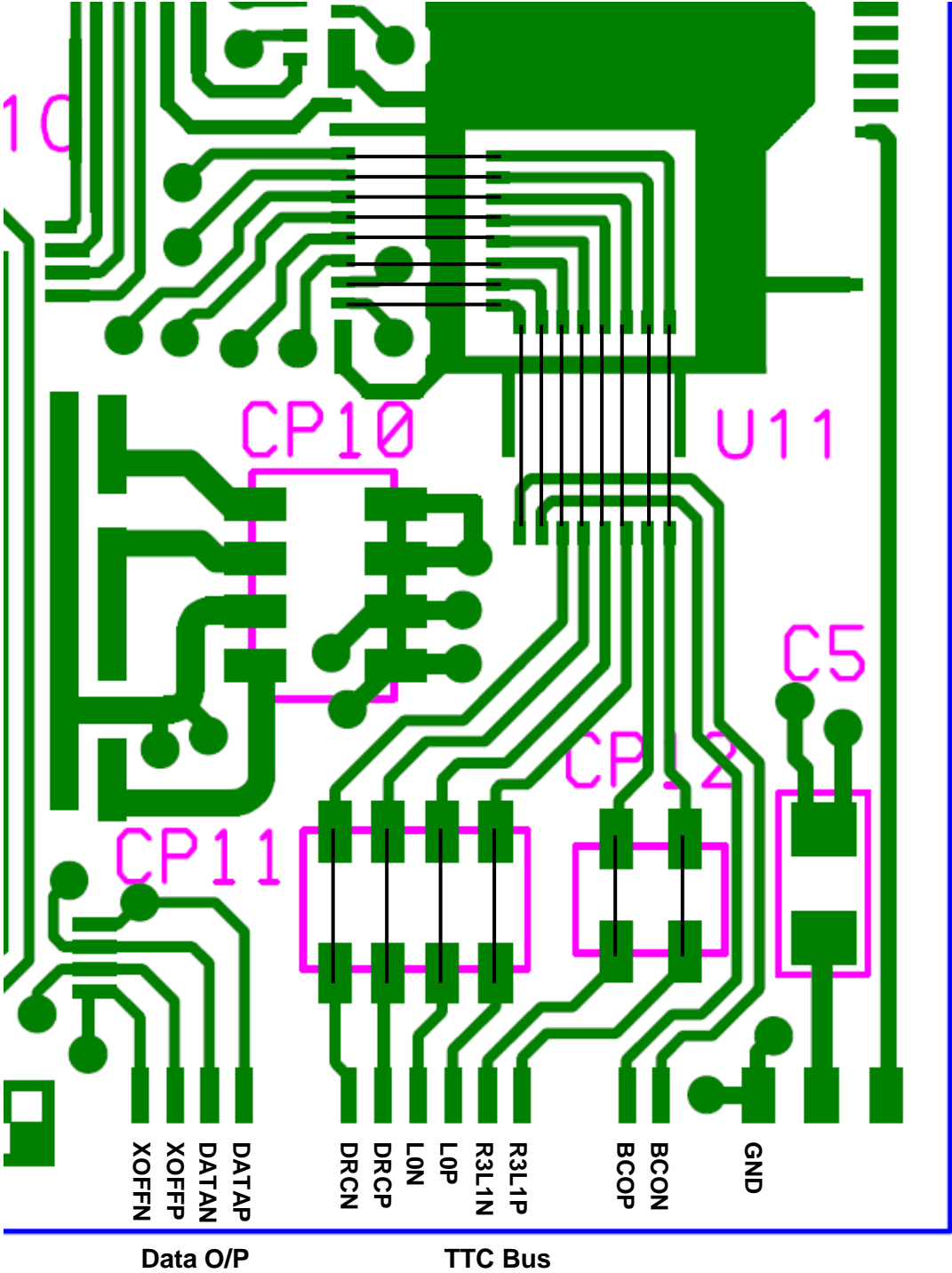
- The dashed line is a bond required at ABC130 locations U1, U2 and U3 only
- The red lines are for the ChipID (0-4) which is unique for each ABC130 (see below)
  - The ID shown above is for location U1 (ChipID:16)

### ABC130 ChipIDs

	16	17	18	19	20	21	22	23	24	25
ID4										
ID3	•	•	•	•	•	•	•	•		
ID2	•	•	•	•					•	•
ID1	•	•			•	•			•	•
ID0	•		•		•		•		•	

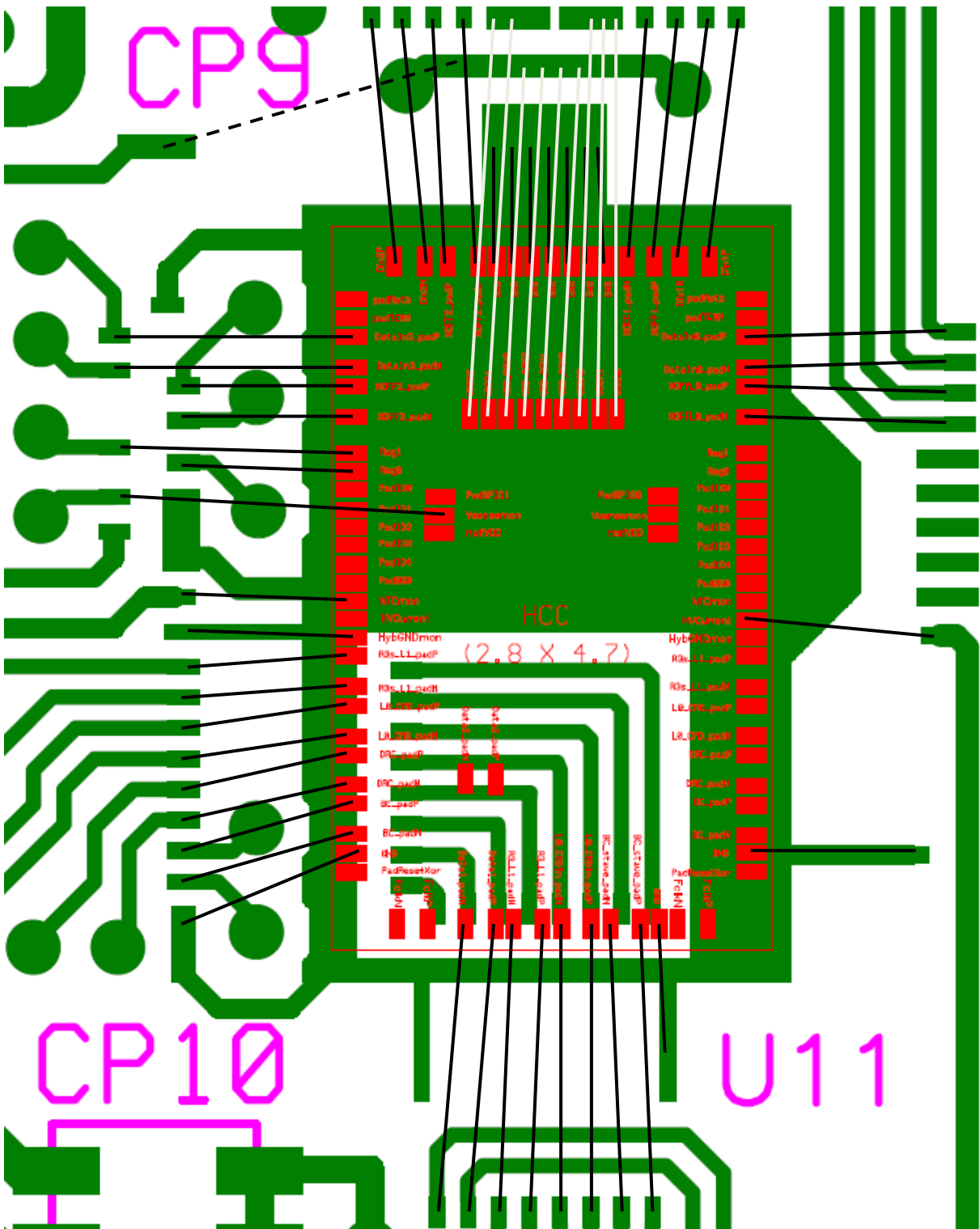
• Wire bond present

**Bypassing of HCC for readout of a single column of 10 x ABC130s**



Capacitor arrays CP11 and CP12 not to be placed (shorting links added)

## HCC bond detail



- There are three NTC Power options (option 2 being used), shown by dashed line above:
1. HalfVDD (connect to HCC)
  2. Unregulated VDD, 1.5V
  3. Regulated VDD, 1.2V