Short Notes on AMI 0.5µm Pads and Frame

After you complete your layout and make *DRC* and *LVS* checks, you will insert your layout in frame. The frame consists of different pads. Here are the most important pads.

- 1. Padgnd: This pad is ground pad. Connect your layout ground nodes to this pad.
- 2. **Padvdd:** This pad is supply voltage pad. Connect your layout Vdd nodes to padvdd.
- 3. **Padout:** This is output pad
- 4. **Padnc:** This is pad spacer.
- 5. Padio: This is input output pad.

Frames

In the "ami05PadLayout" library on Cadence, you have three types of frames to choose from. Depending on your design requirements, you can choose one of the three frames. If you choose frame3, we may not be able to fabricate your design because of its larger size. If you need more Din or Dout pads, talk to Sayed or Prof. Chandy and we may be able to alter the frame.

Frame1 has 40 pads with the total inner area of the frame of $850\mu m \times 850\mu m$. This frame is shown in Fig. 1.

Note that:

Din	stands for digital input.
Dout	stands for digital output.
Dvdd	stands for digital vdd supply voltage.
Dgnd	stands for digital ground.
Clk	stands for clock pad
Ain	stands for analog input.
Aout	stands for analog output.
Avdd	stands for analog vdd supply voltage.
Agnd	stands for analog ground.
vcm	stands for common mode pad.
Abias	stands for analog bias.

Frame 2 has also 40 pads with total area of $850\mu m \times 850\mu m$. This frame is shown in Fig. 2.

Frame3 has 58 pads with total area of 1500µm x 1050µm as shown in Fig. 3.



Fig. 1. Layout of frame 1



Fig. 2. Layout of frame 2



Fig. 3. Layout of frame 3