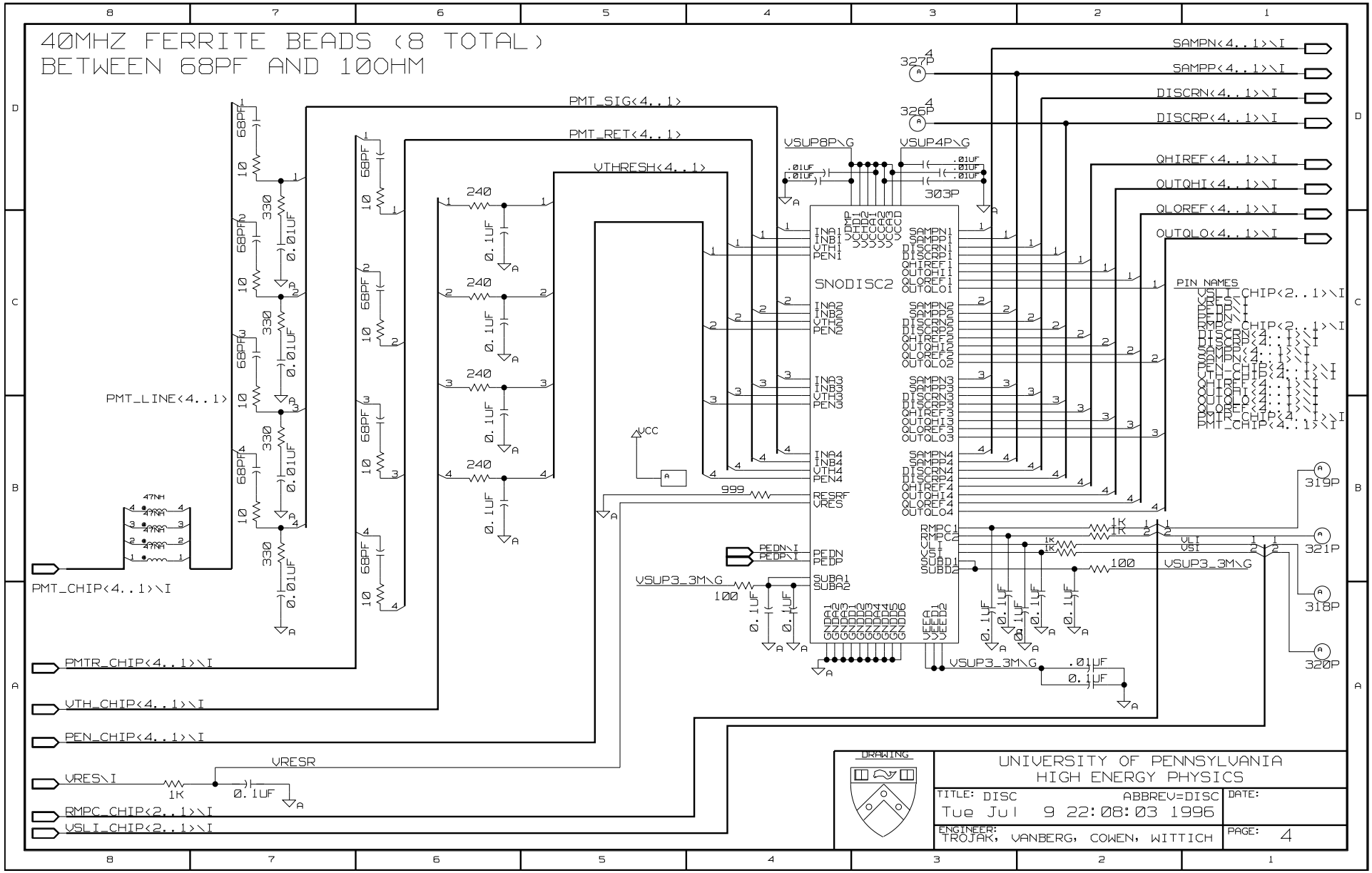DISCRIMINATOR ASIC