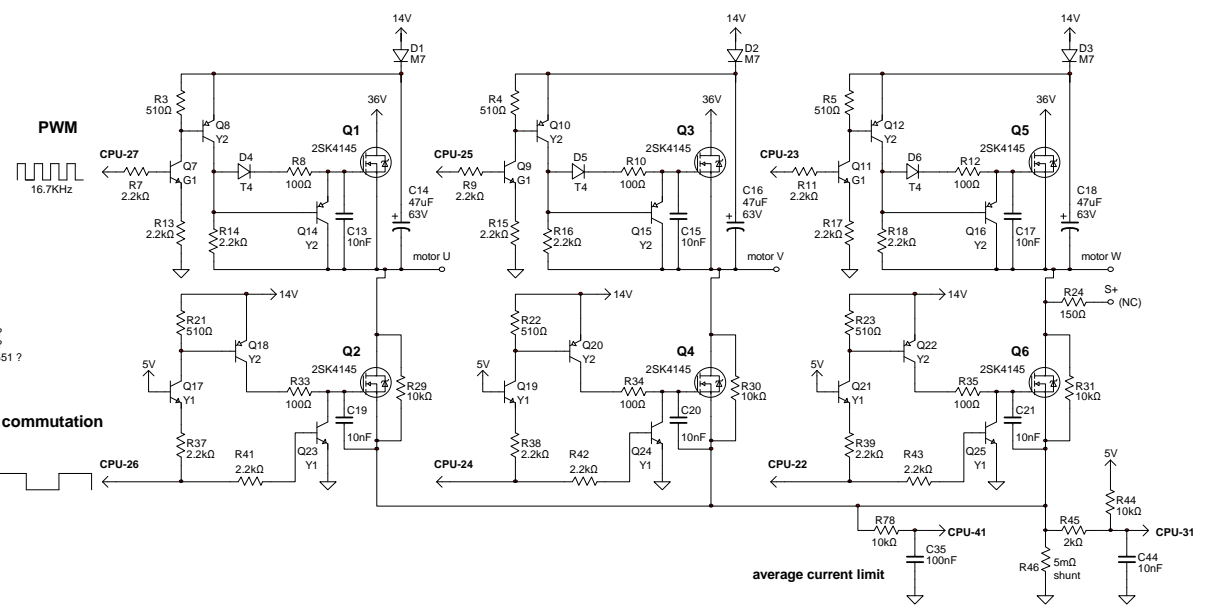


diode T4 = 1N4148
 diode M4 = 1N4007
 transistor Y1 = SS8050 ?
 transistor Y2 = SS8550 ?
 transistor G1 = MMBT1551 ?



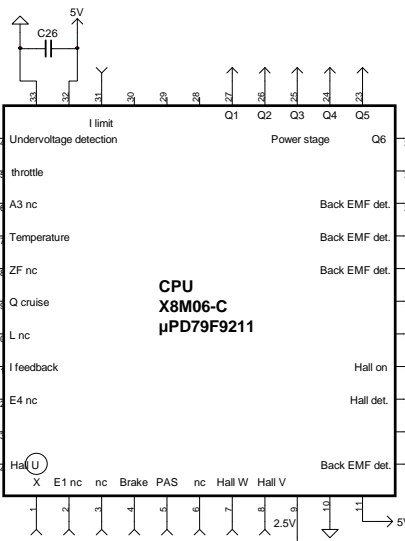
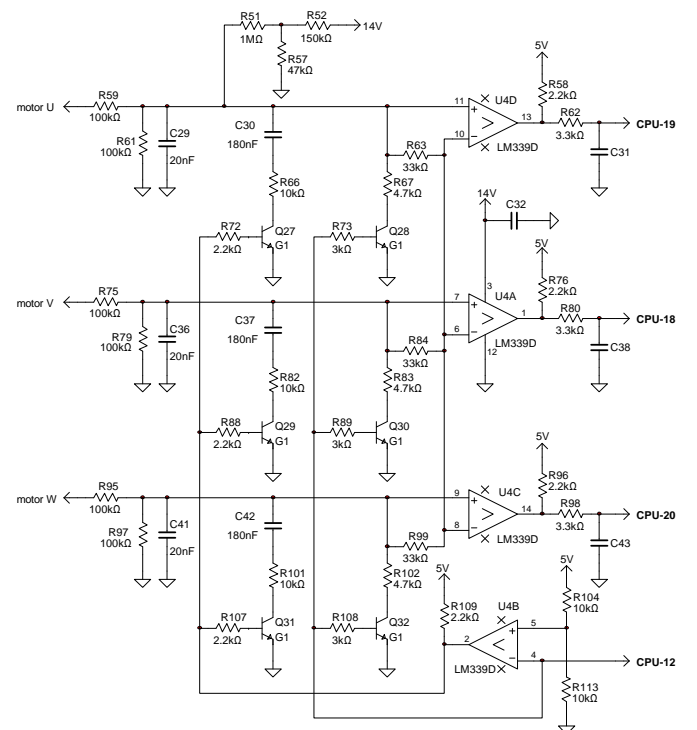
commutation



average current limit

fast current limit

back EMF detection for sensorless operation



KU63 e-bike BLDC motor controller 36V 250W

Version 1-9-2015

Re-engineered by Albert van Dalen