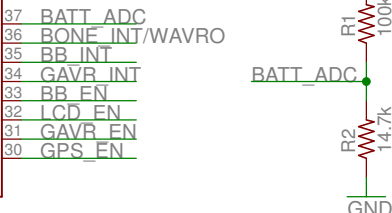


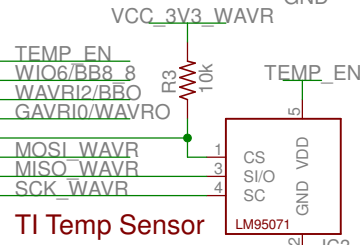
# Watchdog AVR - ATmega324PA MAIN BATT

**Port A**  
 PA0(ADC0/PCINT0)  
 PA1(ADC1/PCINT1)  
 PA2(ADC2/PCINT2)  
 PA3(ADC3/PCINT3)  
 PA4(ADC4/PCINT4)  
 PA5(ADC5/PCINT5)  
 PA6(ADC6/PCINT6)  
 PA7(ADC7/PCINT7)  
 Pins 37-30



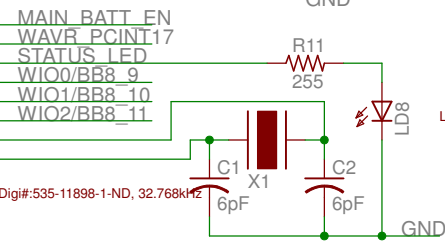
Note: 8.58V maps to 1.1V

**Port B**  
 PB0(XCK0/T0/PCINT8)  
 PB1(T1/CLK0/PCINT9)  
 PB2(AIN0/INT2/PCINT10)  
 PB3(AIN1/OC0A/PCINT11)  
 PB4(SS/OC0B/PCINT12)  
 PB5(MOSI/ICP3/PCINT13)  
 PB6(MISO/OC3A/PCINT14)  
 PB7(SCK/OC3B/PCINT15)  
 Pins 41-44, 1-3



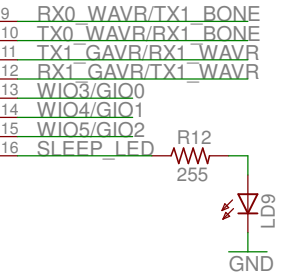
TI Temp Sensor

**Port C**  
 PC0(SCL/PCINT16)  
 PC1(SDA/PCINT17)  
 PC2(TCK/PCINT18)  
 PC3(TMS/PCINT19)  
 PC4(TDO/PCINT20)  
 PC5(TDI/PCINT21)  
 PC6(TOSC1/PCINT22)  
 PC7(TOSC2/PCINT23)  
 Pins 19-26

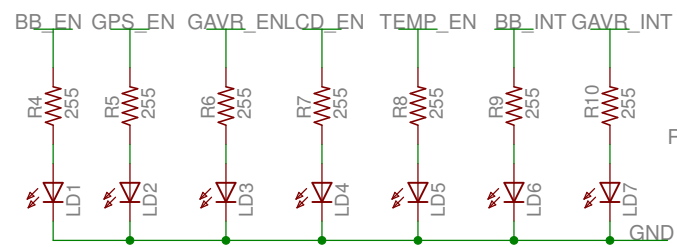


LED: Status is green, Sleep is Red

**Port D**  
 PD0(RXD0/T3/PCINT24)  
 PD1(TXD0/PCINT25)  
 PD2(RXD1/INT0/PCINT26)  
 PD3(TXD1/INT1/PCINT27)  
 PD4(XCK1/OC1B/PCINT28)  
 PD5(OC1A/PCINT29)  
 PD6(ICP/OC2B/PCINT30)  
 PD7(OC2A/PCINT31)  
 Pins 9-16

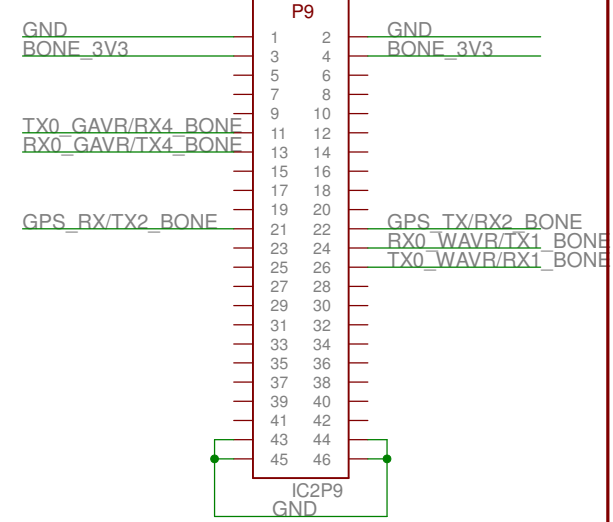
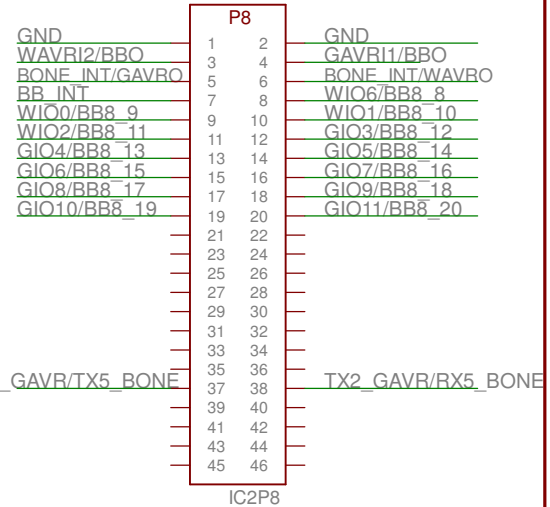


## LED\_DEBUG Array

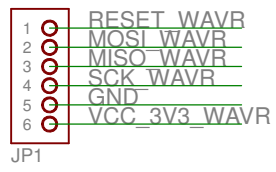


LEDS: Enable are Green-LNJ347W83RA  
 Red are INT-LNJ247W82RACT-ND

## BeagleBone Cape

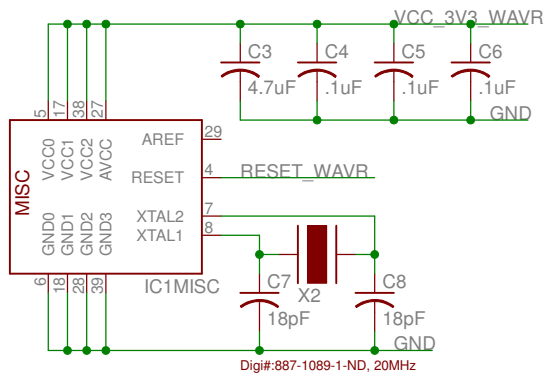


## WAVR Programming Header



## Re.Cycle

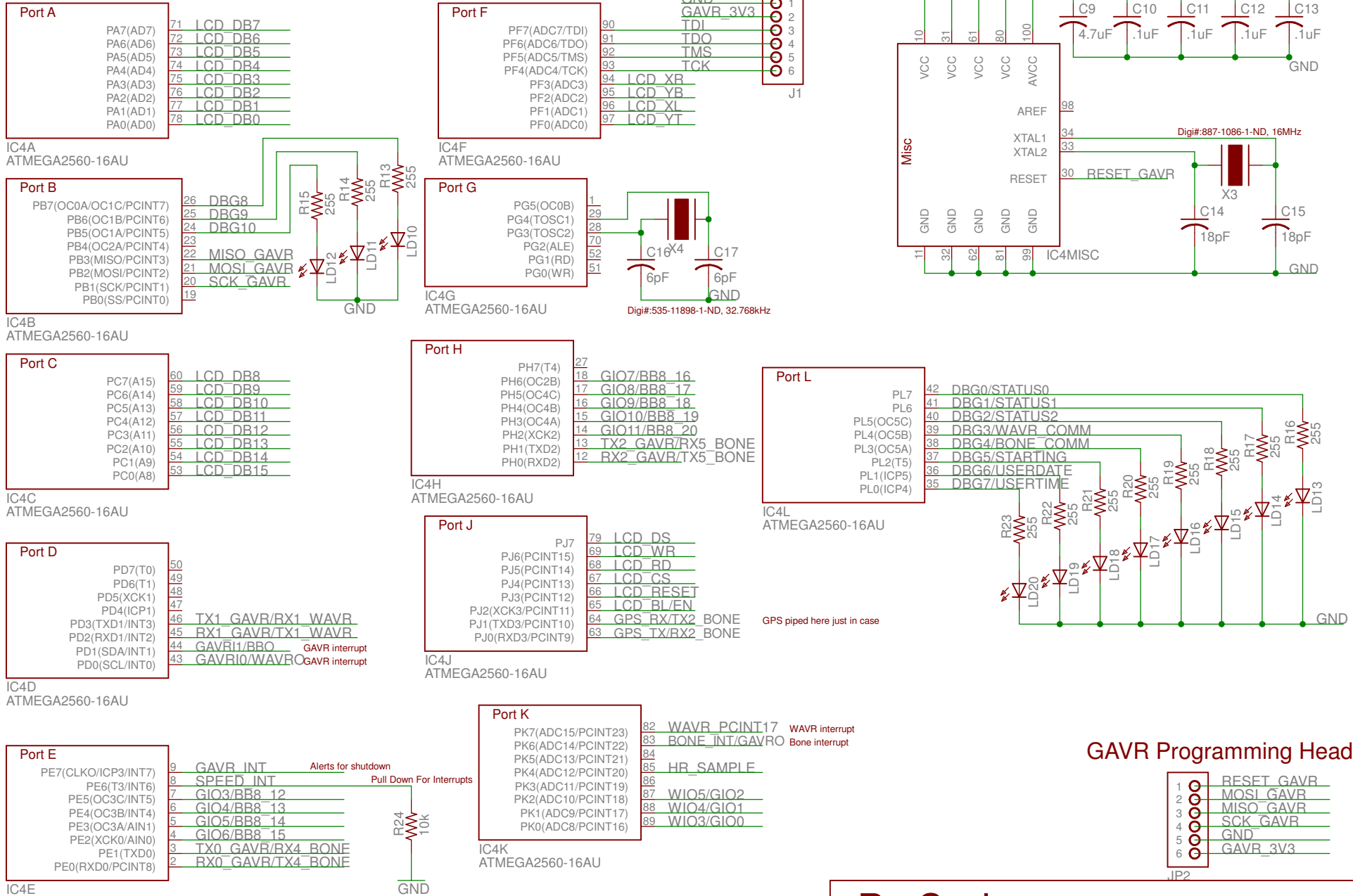
SHEET: Watchdog AVR, Bone Cape		Engineer: TMS
TITLE: Re.Cycle		Author: TMS
Doc#:		Rev: A
Date: February 14, 2013		Sheet: 1/4



Digi#:887-1089-1-ND, 20MHz

# Graphics AVR- ATmeag1280/2560

## JTAG Header



# Re.Cycle

Engineer: TMS

SHEET: Graphics AVR

Author: TMS

TITLE: Re.Cycle

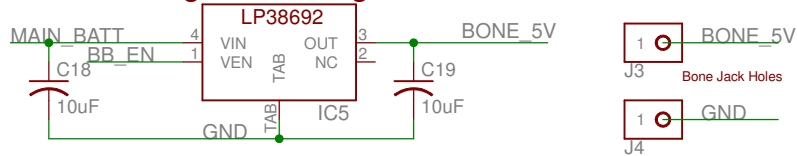
Rev: A

Doc#:

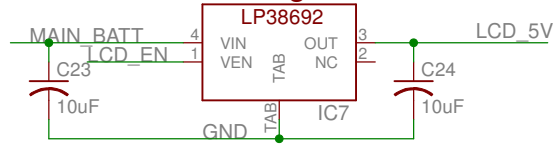
Date: February 14, 2013

Sheet: 2/4

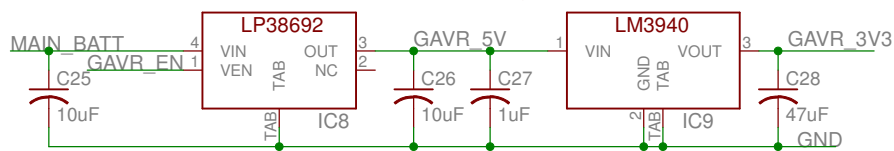
## BeagleBone Regulators



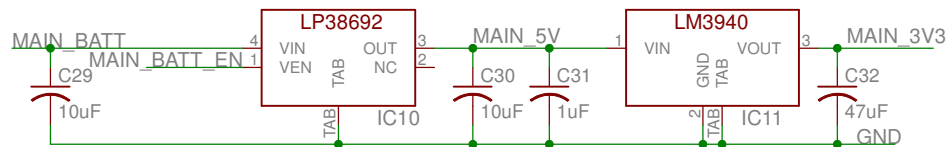
## LCD Regulators



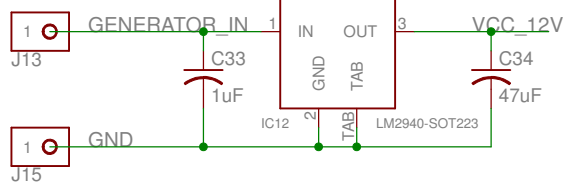
## GAVR Regulators



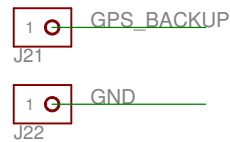
## WAVR Regulators



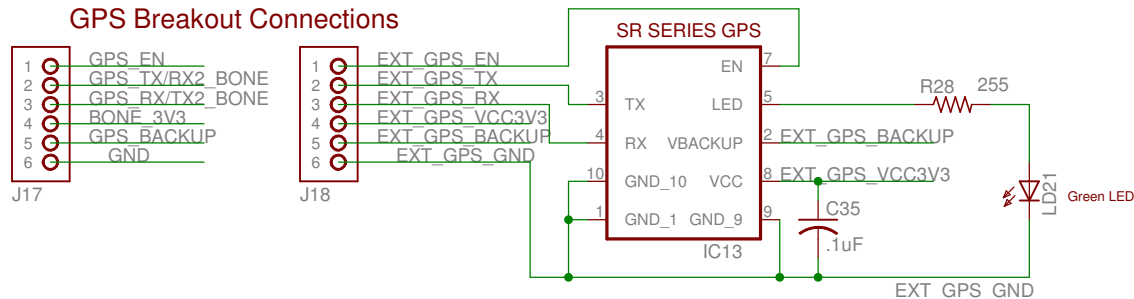
## 12V LDO



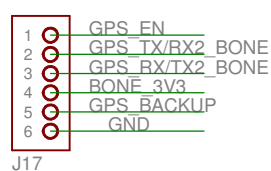
## GPS Backup Battery



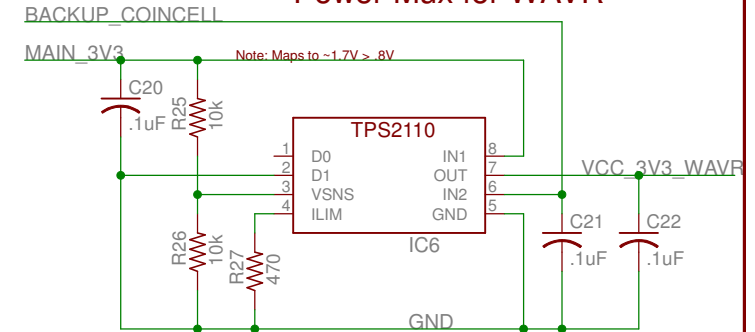
## GPS Module



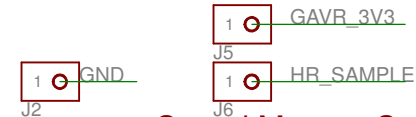
## GPS Breakout Connections



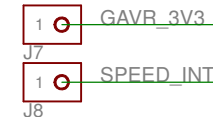
## Power Mux for WAVR



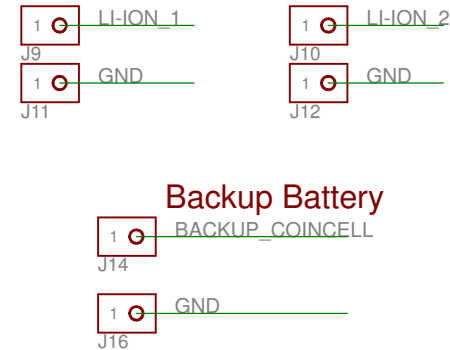
## HR Connection



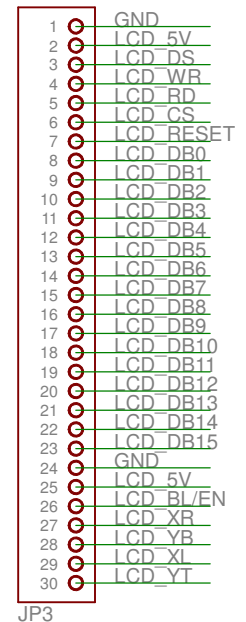
## Speed Magnet Connection



## Battery Connections



## LCD Header



Battery=CR2477  
Case: Digikey#:105K-ND



## Re.Cycle

Engineer: TMS

SHEET: Power, GPS, LCD and External Headers

Author: TMS

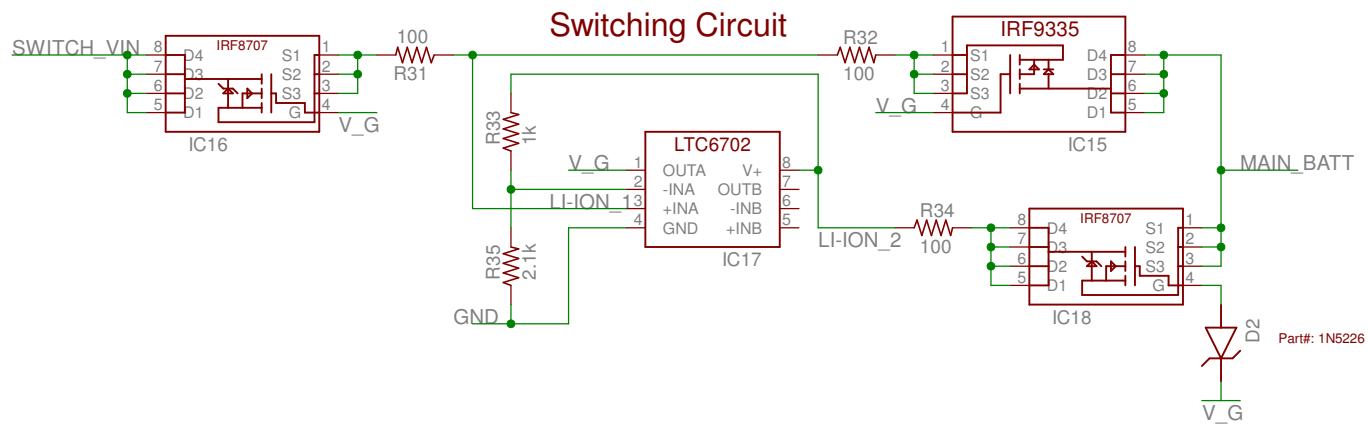
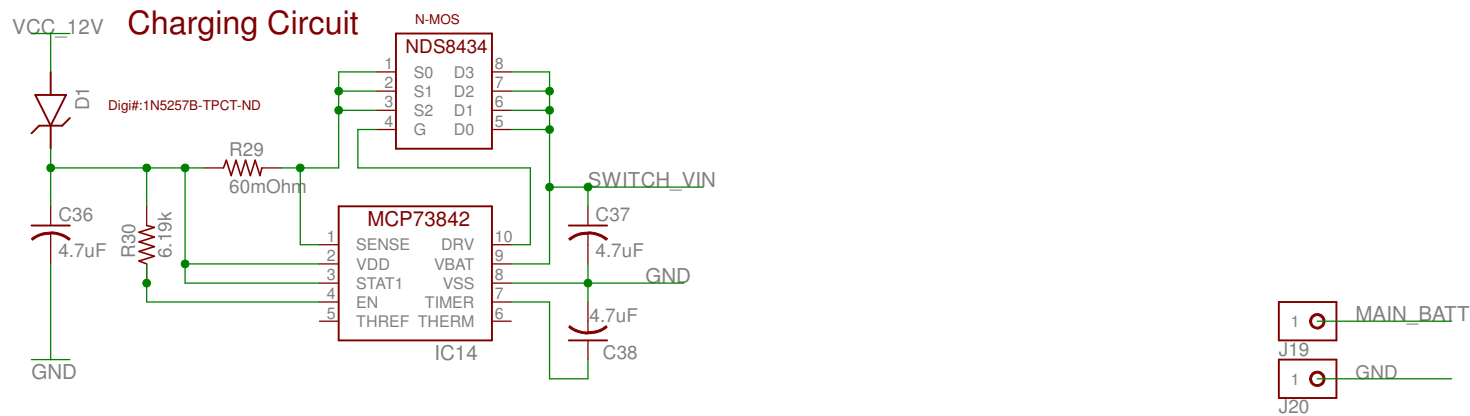
TITLE: Re.Cycle

Rev: A

Doc#:

Date: February 14, 2012

Sheet: 3/4



## Re.Cycle

Engineer: TMS

SHEET: Battery Charging and Switching

Author: TMS

TITLE: Re.Cycle

Rev: A

Doc#:

Date: February 18, 2013

Sheet: 4/4