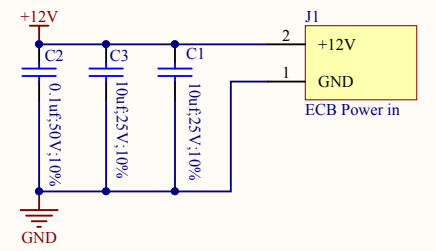
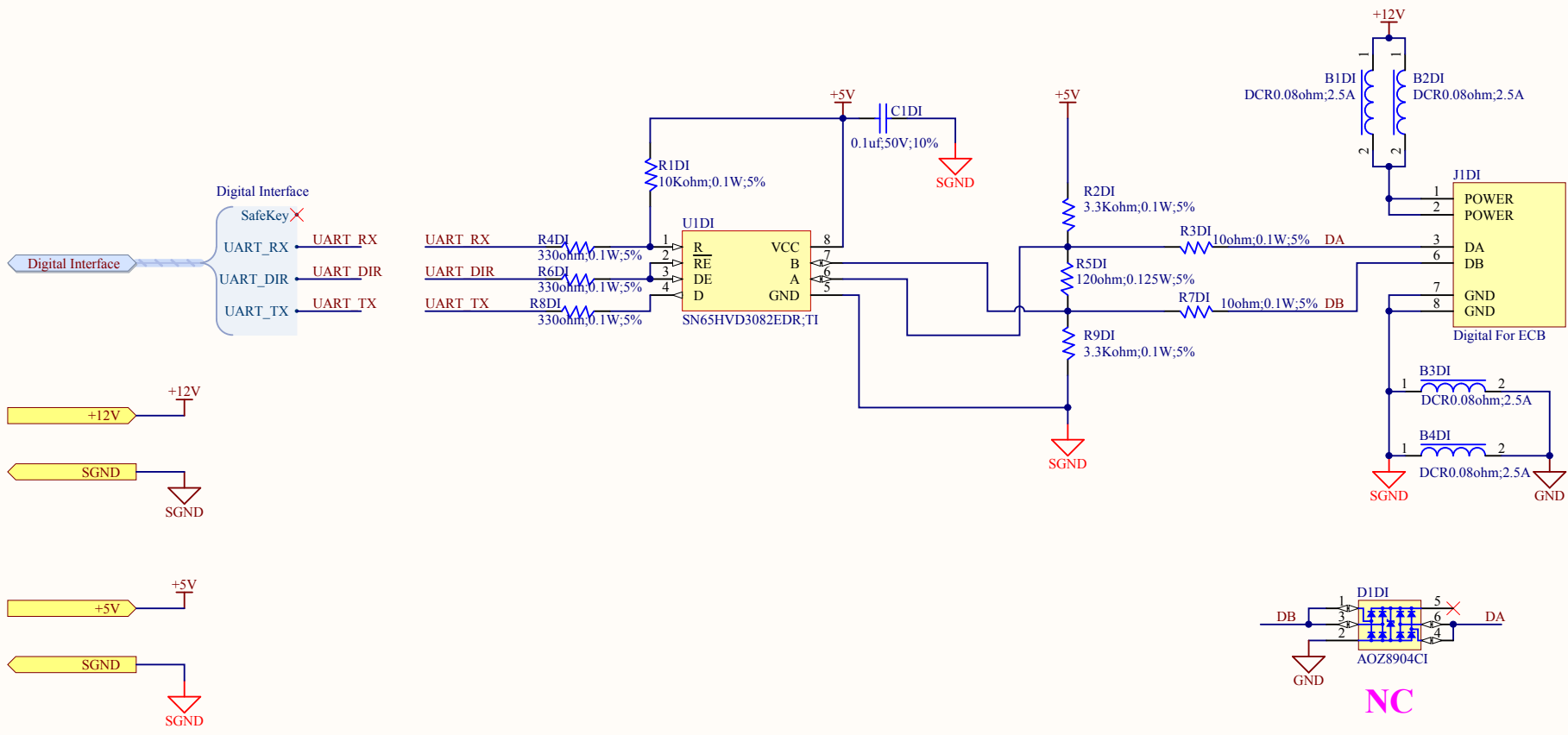


Module	Input Voltage	Output Voltage	Consumption rate	Actual Consumption
Power_DC2DC_02	+12V/2A	+5V/150mA	5V/100mA	5V/54mA
Power_DC2DC_45	+12V/2A	ERP+6V/2A	6V/250mA	6V/150mA
MCU	+5V/150mA		5V/50mA	5V/26mA
Interface_Digital_03	+5V/150mA		5V/20mA	5V/8mA
Interface_Feedback_02	+5V/150mA		5V/30mA	5V/20mA
Motor Driver_02	ERP+6V/2A		6V/250mA	
Total Current				12V/130mA
ERP Current				12V/9mA



Project Information				Module Information				Approval Process			
Project Name Inner ECB	Project Number SOO1708HB	Create Date:	Version: HB	Module Name/Number Inner ECB	Draw by:	Create Date: 2017-02-06	Version: HB	Approved:	Confirm:	Verify:	Engineer:
		Revise Date: 2017-02-06	Sheet of 1/7		TangJiaHui	Revise Date: 2017-02-06	Module Type: common	Scottlin	chuhua	LiuChong	TangJiaHui



Project Information

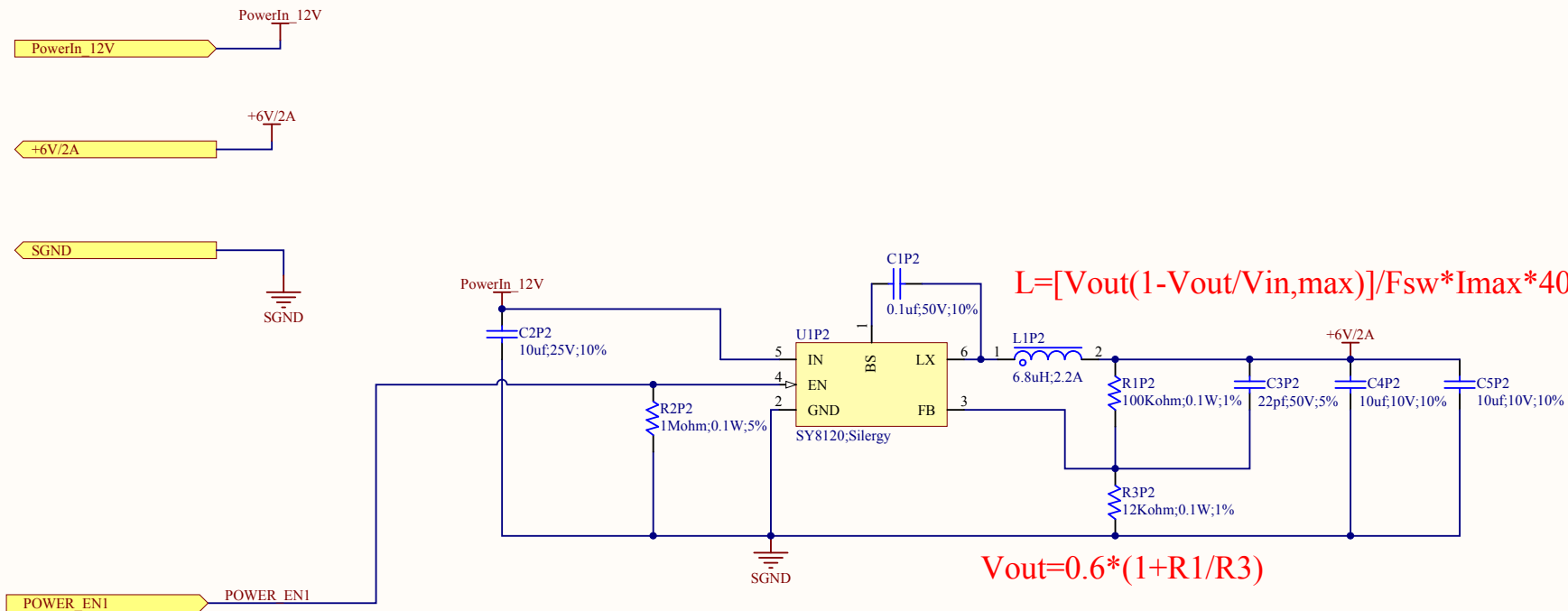
Project Name	Project Number	Create Date:	Version: HB
		Revise Date: 2017-02-06	Sheet of 2/7

Module Information

Module Name/Number	Draw by:	Create Date: 2017-02-06	Version: HB
Interface_Digital_03	liuchong	Revise Date:	Module Type:

Approval Process

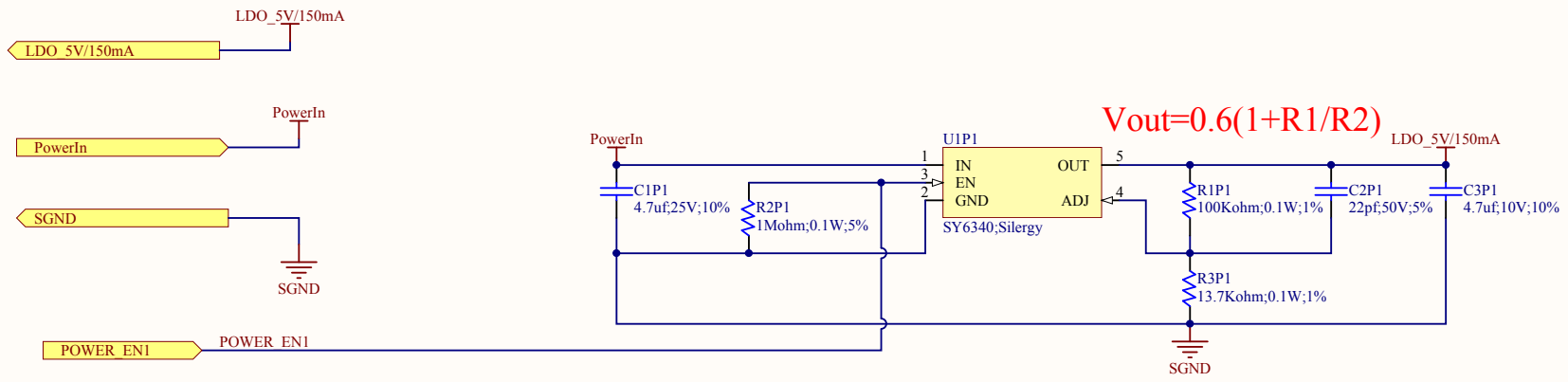
Approved:	Confirm:	Verify:	Engineer:
Scottlin	chuhua	Liuchong	tangjiahui



Project Information			
Project Name	Project Number	Create Date:	Version: HB
SOO1708B.PrjPcb	SOO1708HB	Revise Date: 2017/01/18	Sheet of 3/6

Module Information			
Module Name/Number	File Name:	Create Date:	Version:
Power-DC2DC-43	Power-DC2DC-43	2016/11/28	HB
	Draw by:	Revise Date:	Module Type:
	Werewolf	2016/11/28	common

Approval Process			
Approved:	Confirm:	Verify:	Engineer:
Scottlin	chuhua	Liuchong	tangjiahui



Project Information

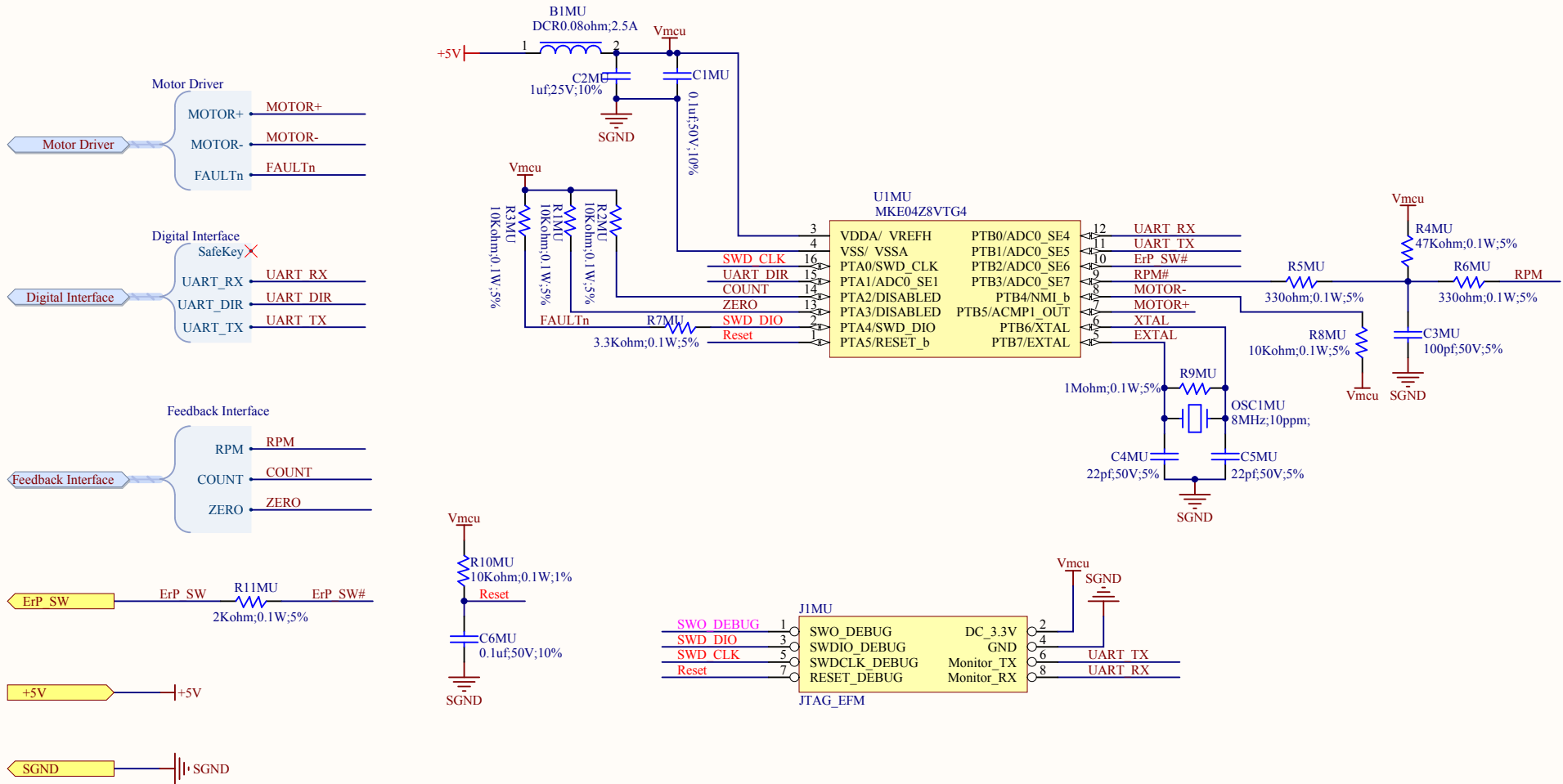
Project Name	Project Number	Create Date:	Version:HB
SOO1708B.PrjPeb	SOO1708HB	Revise Date: 2017/01/18	Sheet of4/7

Module Information

Module Name/Number	File Name:	Create Date:	Version:
Power_DC2DC_02	TV-Port_01	2016/11/28	HB
	Draw by: wangmm	Revise Date:2016/11/28	Module Type:common

Approval Process

Approved:	Confirm:	Verify:	Engineer:
Scottlin	chuhua	Liuchong	tangjiahui



Project Information

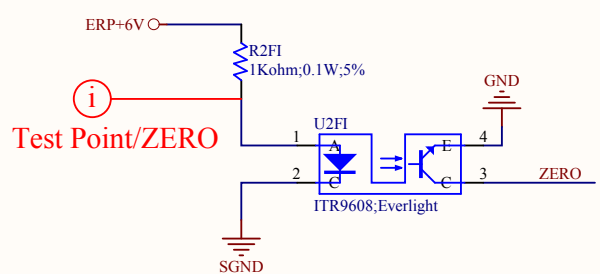
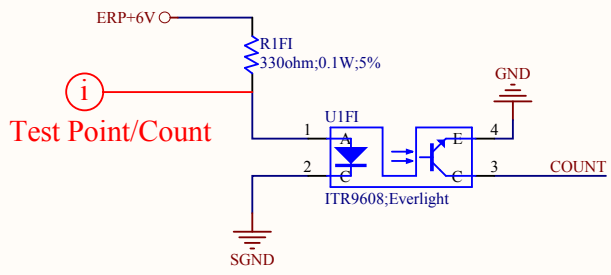
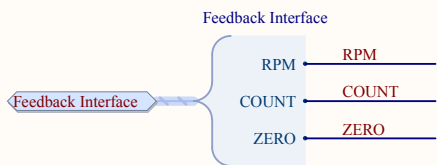
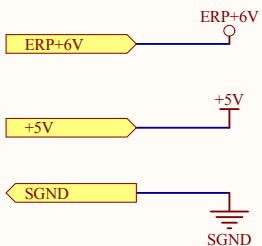
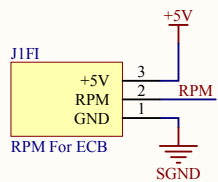
Project Name	Project Number	Create Date:	Version:HB
SOO1708B.PrjPcb	SOO1708HB	Revise Date: 2017-02-06	Sheet of 5/7

Module Information

Module Name/Number	File Name:	Creation Date:	Version:
MCU_MKE04Z8VTG4	MCU_MKE04Z8VTG4	2017-02-06	HB
	Draw by:	Revise Date:	Module Type:
	liuchong	2017-02-06	common

Approval Process

Approved:	Confirm:	Verify:	Engineer:
Scottlin	chuhua	Liuchong	tangjiahui



Project Information

Project Name	Project Number	Create Date:	Version:HB
SOO1708B.PrjPcb	SOO1708HB	Revise Date: 2017-02-06	Sheet of6/7

Module Information

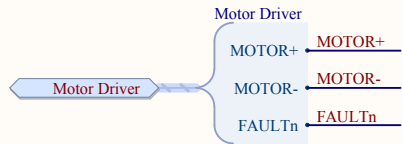
Module Name/Number	File Name: Interface_Feedback_02	Create Date:2017-02-06	Version: HB
Interface_Feedback_02	Draw by: liuchong	Revise Date:2017-02-06	Module Type:common

Approval Process

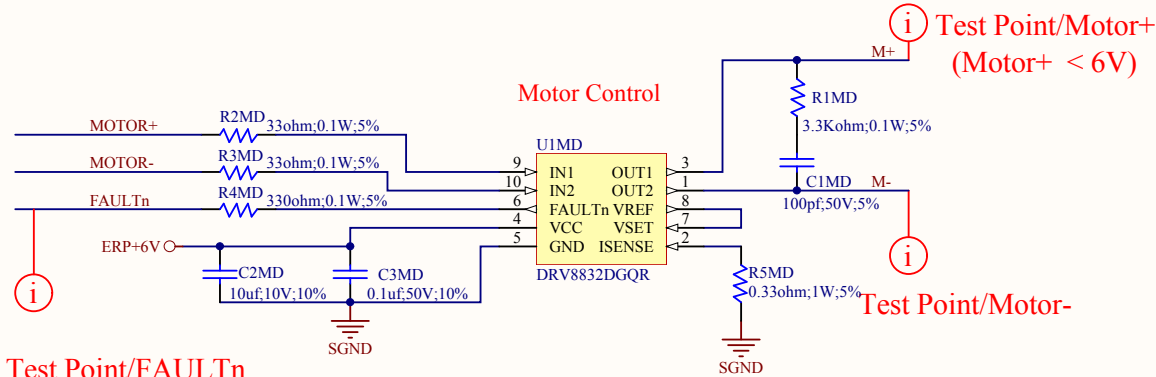
Approved:	Confirm:	Verify:	Engineer:
Scottlin	chuhua	Liuchong	tangjiahui

ERP+6V

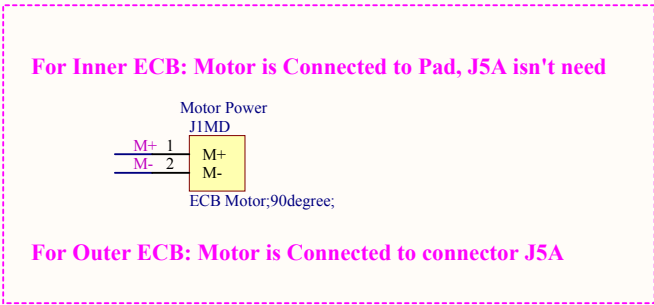
SGND



M+ is the same as M- ; Motor Off
 M+ is different with M- ; Motor On



Test Point/FAULTn
 high is 5V (during normal operation)
 Low < 0.3V (when output is short)



For Inner ECB: Motor is Connected to Pad, J5A isn't need

For Outer ECB: Motor is Connected to connector J5A

R33 used to set the current limit must be less than 1 Ω.
 Its value may be calculated as follows:
 $R = 0.2 \text{ V} / I_{\text{sense}}$
 $P_w = 0.04 / R$

FAULTn: Fault output: Open-drain output driven low if fault condition present



Project Information			
Project Name	Project Number	Create Date:	Version: HB
Inner ECB	MLH1708HB	Revise Date: 2017-02-06	Sheet of 7/7

Module Information			
Module Name/Number	Draw by:	Create Date: 2017-02-06	Version: HB
ECB Motor Driver_01	Liuchong	Revise Date: 2017-02-06	Module Type: Hardware

Approval Process			
Approved:	Confirm:	Verify:	Engineer:
Scottlin	chuhua		Liuchong