REVISIONS				
REV	ECN#	REV DESCRIPTION	DATE	APPROVED
1			5/17/2012	JT
2		CHANGED FUSE CALLOUTS AND IGN SW DIAGRAM	12/13/2012	SA
3		AUX RELAY EXAMPLES ADDED	9/27/13	SA
3		ADDITIONAL EXAMPLES ADDED	9/30/13	SA

RECOMMEND DEDICATING THIS CIRCUIT SHARING WITH OTHER VEHICLE WIRING CAN CAUSE FEEDBACK AND UNEXPECTED OPERATION

IGNITION SWITCH

+12V

RELAYS WITH INTERNAL DIODES MUST HAVE THE ANODE SIDE OF THE COIL CONNECTED TO THE ECU

TO LOWSIDE SWITCH FROM ECU

C-1

J1B

+12V_SW
+12V
+12V
Ground
Ground
+5V_OUT_1
+5V_OUT_1

J1A

Ground
12V_Rly_Cntrl
+12V_Perm
AGND_1
AGND_1

C-2

J2B

Ground
Ground
+12V_Perm
FUEL PUMP
BOOST CTRL
AGND_2
AGND_2
AGND_2

J2A

+5V_Out_2
+5V_Out_2
+5V_Out_2
+12V
Ground
Ground

+12V_SW	Fused connection to vehicle ignition switch (+12V in RUN/CRANK only)
+12V	Relay driven +12V power source for ECU power and auxiliary outputs
+12V_Rly_Cntrl	Switched ground from ECU connected to relay coil primary negative
+12V_Perm	Fused connection to battery positive terminal (+12V, always hot)
+5V_OUT	+5V supplied by ECU
AGND	Analog Ground used as ground points for sensors
Ground	Battery ground

+12V TO EXTERNAL DEVICE

+12V TO EXTERNAL DEVICE

VERY IMPORTANT:
ALL USER INSTALLED AUXILIARY RELAYS OR DEVICES MUST BE POWERED BY THE OUTPUT FROM THE EFI MAIN RELAY

EFI MAIN

USER1

USER2

GROUND OR LOWSIDE SWITCH FROM ECU

PWM SOLENOID

FLYBACK DIODES ARE NECESSARY FOR BEST PWM CONTROL. SEE PINOUT SHEET FOR FLYBACK EQUIPPED OUTPUTS

30A

10A

5A IGN

FUSE

FUSE

ALL USER INSTALLED AUXILIARY CIRCUITS SHOULD BE PROTECTED WITH A PROPERLY SIZED FUSE AS SHOWN

BATTERY

CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE

APPROVALS	DATE
DRAWN JTomashefsky	5/17/2012
CHECKED --	--
RESP ENG --	--
MFG ENG --	--
QUAL ENG --	--

INFINITY-10 POWER DISTRIBUTION

SIZE A | FILE NAME | REV. 4

SCALE --

SHEET 1 OF 1