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Rev	Description	Date	Approved
X1	Initial Draft	21/01/19	Eain
A1	First release	21/01/19	Eain

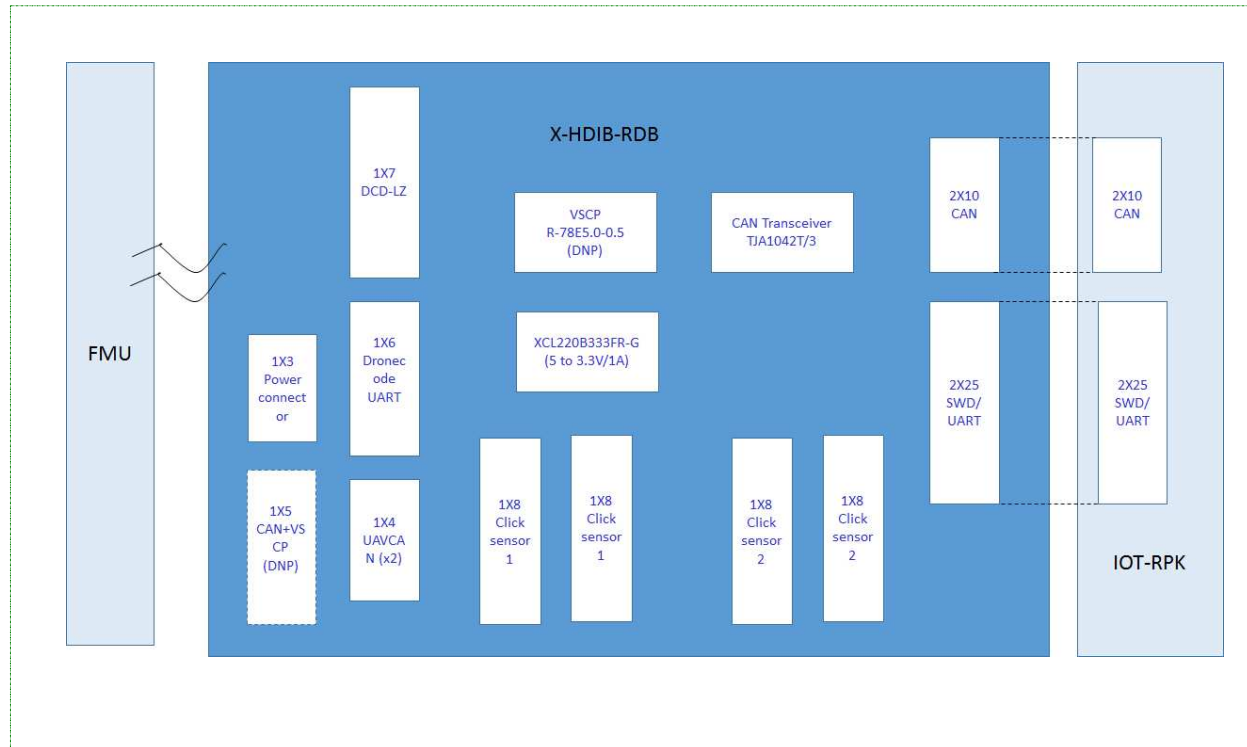
RDDRONE-IOT

		6501 William Cannon Drive West Austin, TX 78725-6598	
<small>This document contains information proprietary to NXP and shall not be used for engineering design, procurement or manufacture in whole or in part without the express written permission of NXP Semiconductors.</small>			
Designer: Ana Sanz	Drawing Title: RDDRONE-IOT	ICAP Classification: CP: X	IMD: PURB:
Drawn by: Ana Sanz	Page Title: TITLE PAGE		
Approved: Iain Galloway	Size: C	Document Number: SCH-45902 PDF: SPF-45902	Rev: A2
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Notes

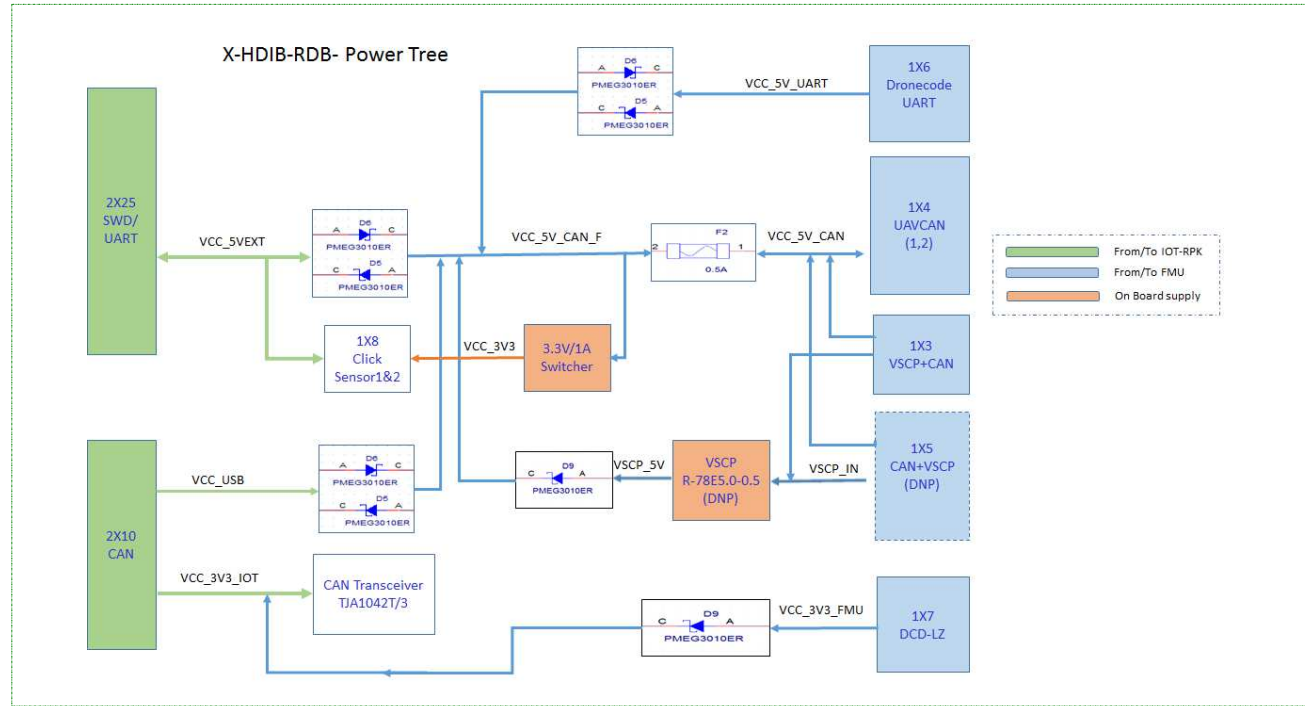
1. Interrupted lines coded with the same letter or letter combinations are electrically connected.
2. Device type number is for reference only. The number varies with the manufacturer.
3. Special signal usage:
 _B Denotes - Active-Low Signal
 <> or [] Denotes - Vectored Signals
4. Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.

BLOCK DIAGRAM



ICAP Classification:	CP:	NO:	PUB:
Drawing Title: RDDRONE-IOT			
Page Title: Notes			
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Power Tree

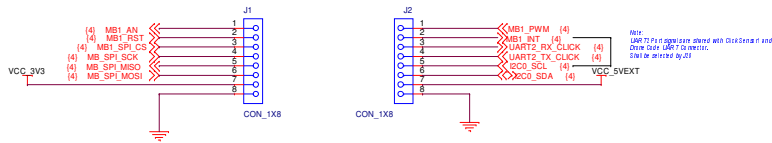


EAP Classification: CP:		EUC:		PUBL:	
Drawing Title: RDDRONE-IOT					
Page Title: Placement Diagram					
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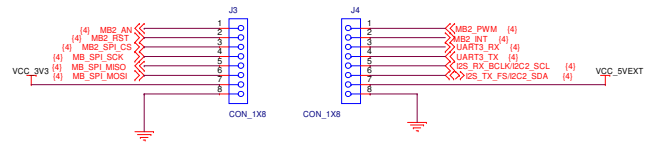
X-HDIB-EVB

Micro Bus Socket - SSM-108-L-SV (Samtec)

Click Sensor1 Socket

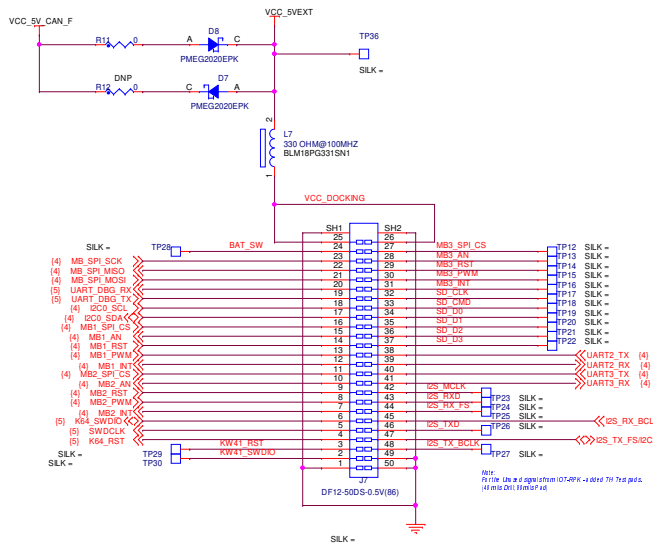


Click Sensor2 Socket



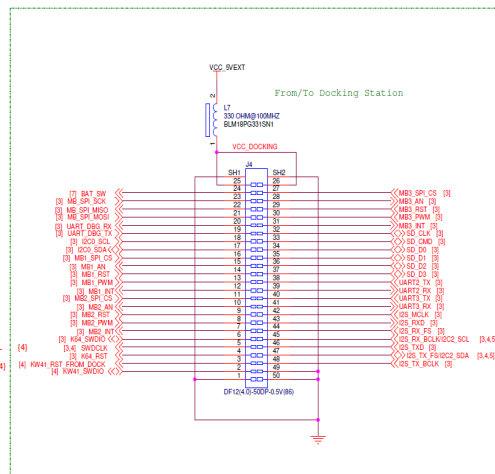
IOT- RPK Mating connectors

UART/SWD J4 Mating connector
DF12-50DS-0.5V(86) Hirose

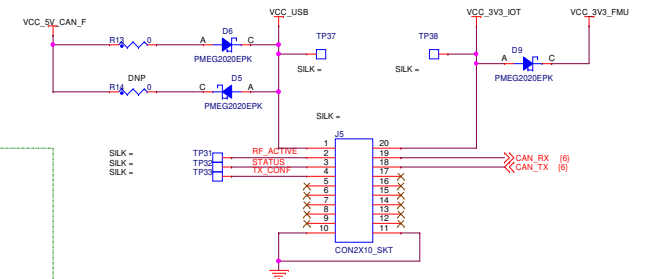


Rev B- IOT-RPK Pinout

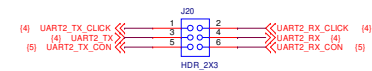
* Pin1 to pin1 mating of IOT-RPK to HDIB-RDB




CAN (J7) Mating connector
- DF12-20DS-0.5V(86) Hirose



UART2 Port sharing



Jumper	Short	UART2 Sharing
J20	Pin 3-1	UART TX signal to Click sensor
	Pin 3-5	UART TX signal to Dronecode Connector
	Pin 4-2	UART RX signal to Dronecode Connector
	Pin 4-4	UART RX signal to Click sensor



QAP Classification: CP IUC: PUB

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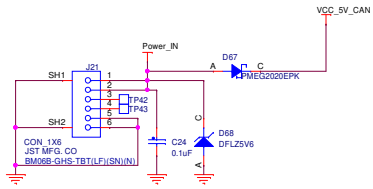
Page Title: RDDRONE-IOT
IOT-PRK Connectors

Size C **Document Number** **SCH-45902 PDF: SPF-45902** **Rev A2**

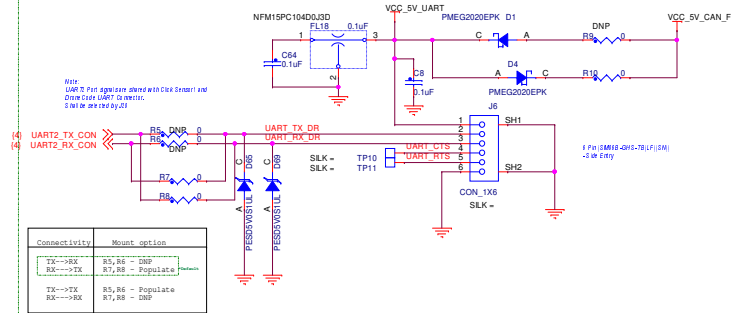
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FMU Mating Connectors

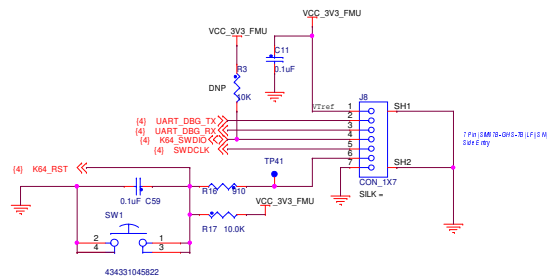
Power-Input-Module



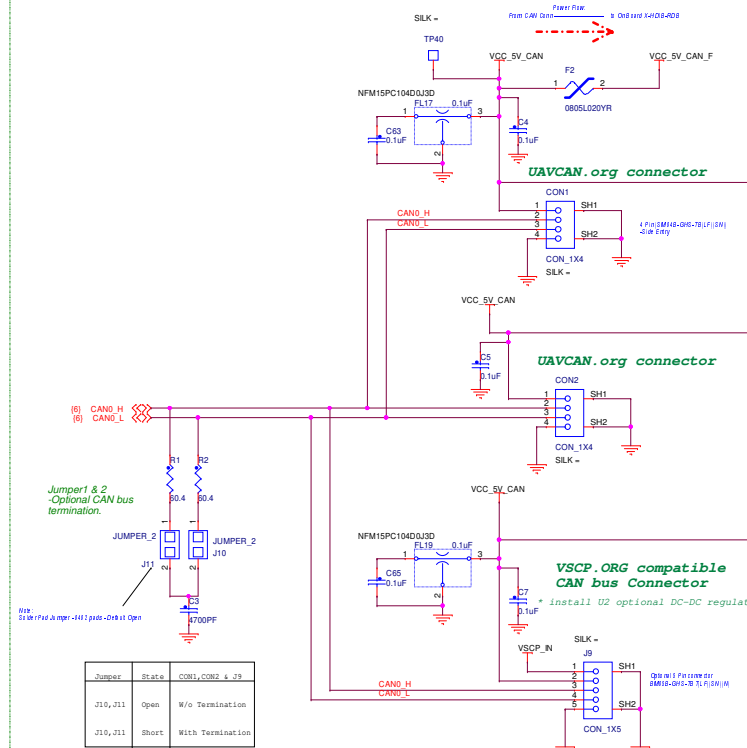
Dronecode.org compatible UART Connector



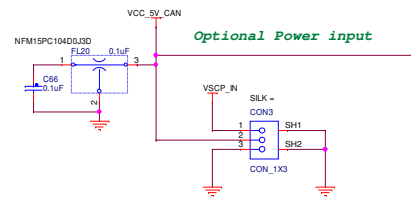
NXP DCD-LZ debug connector. HoverGames.com and PX4.org compatible with REF-HGRDRONE-K66 and RDDRONE-FMUK66



Dronecode.org UAVCAN.org compatible CAN bus connector



Optional Power input



ICAP Classification: CP, IUC, PUB

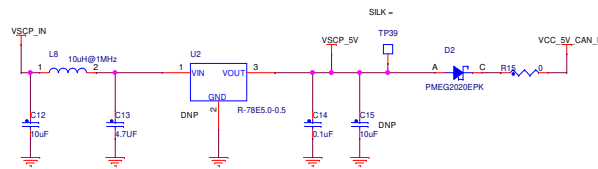
RDDRONE-IOT

Page Title: FMU Interface Connectors

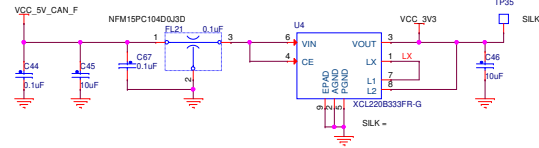
Size C Document Number SCH-45902 PDF: SPF-45902 Rev A/C
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ON Board Power & CAN

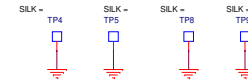
VSCP.org
optional DC-DC regulator (not populated)



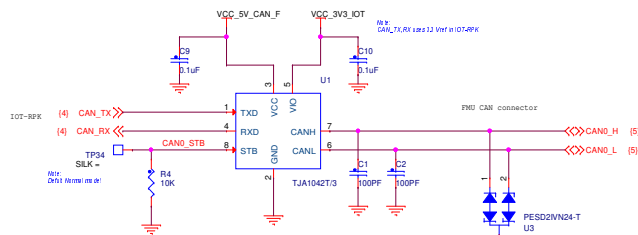
3.3V Supply Switcher



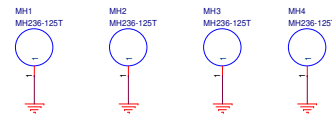
GND TPs



CAN Transceiver



PTH - 125mils Drill



NPTH - 120mils Drill



EAP Classification: CP		IUC: PUB	
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