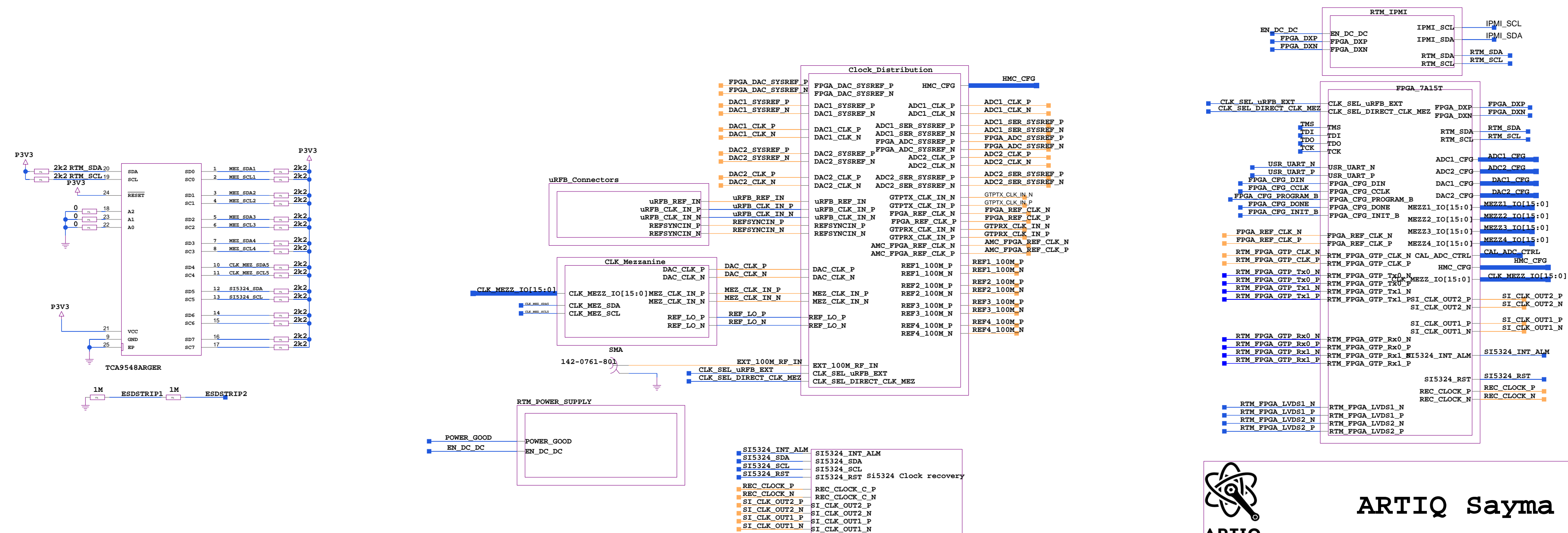
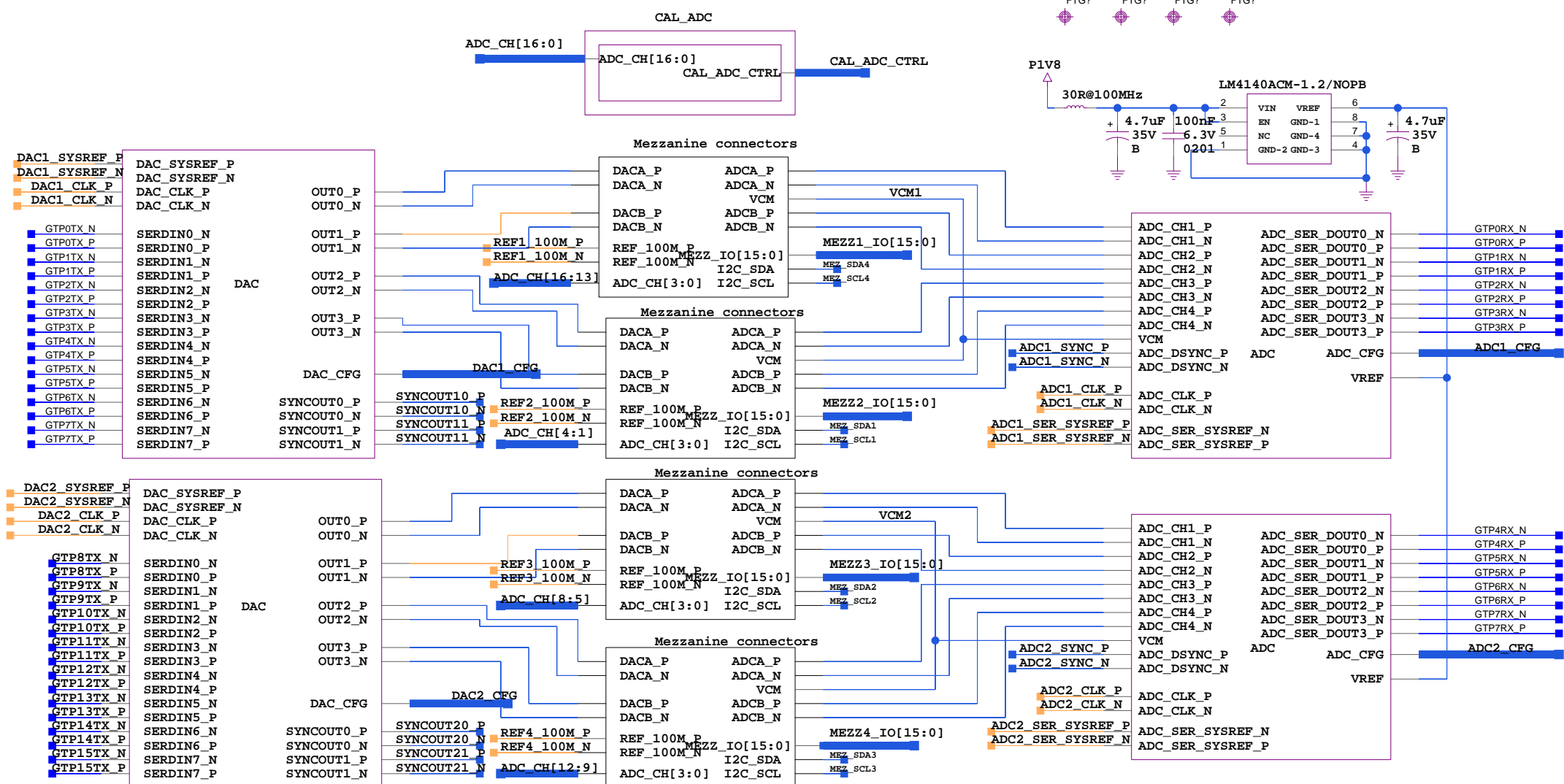


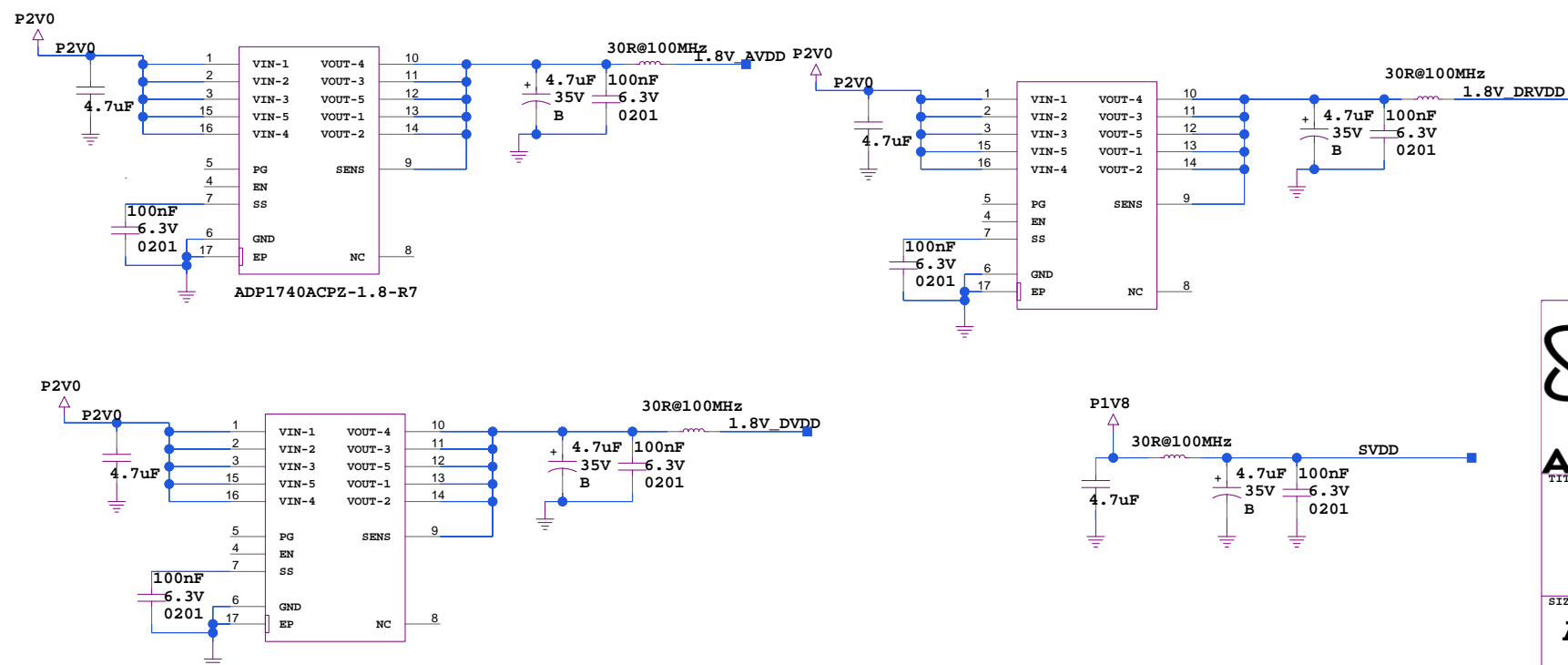
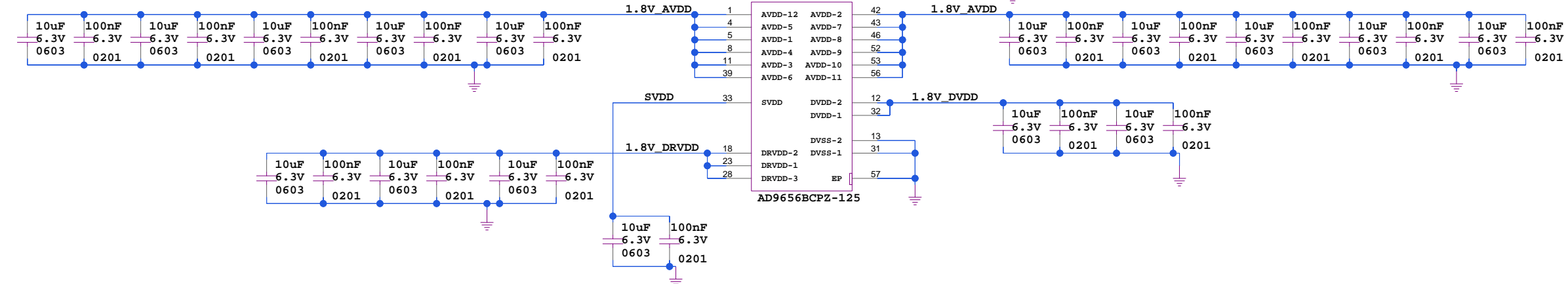
The diagrams show the pinmux configuration for the i.MX8M Mini. Each diagram consists of a pin list on the left, a central pinmux table, and a pin list on theright. The diagrams are labeled J7, J7, and J7 at the bottom.

Diagram 1 (Left): Shows pinmux for RTM, ADC, and various peripheral functions. The pin list on the left includes b510, b509, b508, b507, b506, b505, b504, b503, b502, b501, b500, b499, b498, b497, b496, b495, b494, b493, b492, b491, b490, b489, b488, b487, b486, b485, b484, b483, b482, b481, b480, b479, b478, b477, b476, b475, b474, b473, b472, b471, b470, b469, b468, b467, b466, b465, b464, b463, b462, b461, b460, b459, b458, b457, b456, b455, b454, b453, b452, b451, b450, b449, b448, b447, b446, b445, b444, b443, b442, b441, b440, b439, b438, b437, b436, b435, b434, b433, b432, b431, b430, b429, b428, b427, b426, b425, b424, b423, b422, b421, b420, b419, b418, b417, b416, b415, b414, b413, b412, b411, b410, b409, b408, b407, b406, b405, b404, b403, b402, b401, b400, b399, b398, b397, b396, b395, b394, b393, b392, b391, b390, b389, b388, b387, b386, b385, b384, b383, b382, b381, b380, b379, b378, b377, b376, b375, b374, b373, b372, b371, b370, b369, b368, b367, b366, b365, b364, b363, b362, b361, b360, b359, b358, b357, b356, b355, b354, b353, b352, b351, b350, b349, b348, b347, b346, b345, b344, b343, b342, b341, b340, b339, b338, b337, b336, b335, b334, b333, b332, b331, b330, b329, b328, b327, b326, b325, b324, b323, b322, b321, b320, b319, b318, b317, b316, b315, b314, b313, b312, b311, b310, b309, b308, b307, b306, b305, b304, b303, b302, b301, b300, b299, b298, b297, b296, b295, b294, b293, b292, b291, b290, b289, b288, b287, b286, b285, b284, b283, b282, b281, b280, b279, b278, b277, b276, b275, b274, b273, b272, b271, b270, b269, b268, b267, b266, b265, b264, b263, b262, b261, b260, b259, b258, b257, b256, b255, b254, b253, b252, b251, b250, b249, b248, b247, b246, b245, b244, b243, b242, b241, b240, b239, b238, b237, b236, b235, b234, b233, b232, b231, b230, b229, b228, b227, b226, b225, b224, b223, b222, b221, b220, b219, b218, b217, b216, b215, b214, b213, b212, b211, b210, b209, b208, b207, b206, b205, b204, b203, b202, b201, b200, b199, b198, b197, b196, b195, b194, b193, b192, b191, b190, b189, b188, b187, b186, b185, b184, b183, b182, b181, b180, b179, b178, b177, b176, b175, b174, b173, b172, b171, b170, b169, b168, b167, b166, b165, b164, b163, b162, b161, b160, b159, b158, b157, b156, b155, b154, b153, b152, b151, b150, b149, b148, b147, b146, b145, b144, b143, b142, b141, b140, b139, b138, b137, b136, b135, b134, b133, b132, b131, b130, b129, b128, b127, b126, b125, b124, b123, b122, b121, b120, b119, b118, b117, b116, b115, b114, b113, b112, b111, b110, b109, b108, b107, b106, b105, b104, b103, b102, b101, b100, b99, b98, b97, b96, b95, b94, b93, b92, b91, b90, b89, b88, b87, b86, b85, b84, b83, b82, b81, b80, b79, b78, b77, b76, b75, b74, b73, b72, b71, b70, b69, b68, b67, b66, b65, b64, b63, b62, b61, b60, b59, b58, b57, b56, b55, b54, b53, b52, b51, b50, b49, b48, b47, b46, b45, b44, b43, b42, b41, b40, b39, b38, b37, b36, b35, b34, b33, b32, b31, b30, b29, b28, b27, b26, b25, b24, b23, b22, b21, b20, b19, b18, b17, b16, b15, b14, b13, b12, b11, b10, b9, b8, b7, b6, b5, b4, b3, b2, b1, b0.

Diagram 2 (Middle): Shows pinmux for RTM, ADC, and various peripheral functions. The pin list on the left includes b510, b509, b508, b507, b506, b505, b504, b503, b502, b501, b500, b499, b498, b497, b496, b495, b494, b493, b492, b491, b490, b489, b488, b487, b486, b485, b484, b483, b482, b481, b480, b479, b478, b477, b476, b475, b474, b473, b472, b471, b470, b469, b468, b467, b466, b465, b464, b463, b462, b461, b460, b459, b458, b457, b456, b455, b454, b453, b452, b451, b450, b449, b448, b447, b446, b445, b444, b443, b442, b441, b440, b439, b438, b437, b436, b435, b434, b433, b432, b431, b430, b429, b428, b427, b426, b425, b424, b423, b422, b421, b420, b419, b418, b417, b416, b415, b414, b413, b412, b411, b410, b409, b408, b407, b406, b405, b404, b403, b402, b401, b400, b399, b398, b397, b396, b395, b394, b393, b392, b391, b390, b389, b388, b387, b386, b385, b384, b383, b382, b381, b380, b379, b378, b377, b376, b375, b374, b373, b372, b371, b370, b369, b368, b367, b366, b365, b364, b363, b362, b361, b360, b359, b358, b357, b356, b355, b354, b353, b352, b351, b350, b349, b348, b347, b346, b345, b344, b343, b342, b341, b340, b339, b338, b337, b336, b335, b334, b333, b332, b331, b330, b329, b328, b327, b326, b325, b324, b323, b322, b321, b320, b319, b318, b317, b316, b315, b314, b313, b312, b311, b310, b309, b308, b307, b306, b305, b304, b303, b302, b301, b300, b299, b298, b297, b296, b295, b294, b293, b292, b291, b290, b289, b288, b287, b286, b285, b284, b283, b282, b281, b280, b279, b278, b277, b276, b275, b274, b273, b272, b271, b270, b269, b268, b267, b266, b265, b264, b263, b262, b261, b260, b259, b258, b257, b256, b255, b254, b253, b252, b251, b250, b249, b248, b247, b246, b245, b244, b243, b242, b241, b240, b239, b238, b237, b236, b235, b234, b233, b232, b231, b230, b229, b228, b22



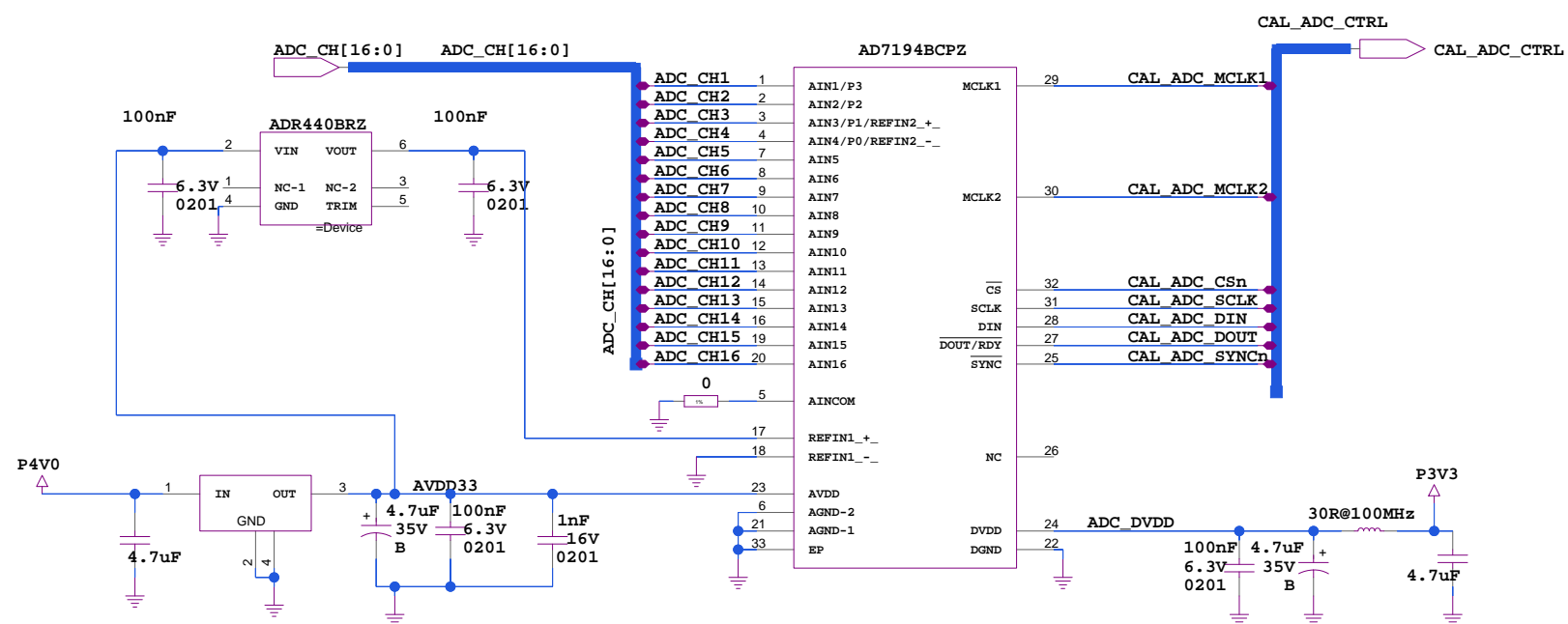
Sayma_RTM



ADC_JESD204B

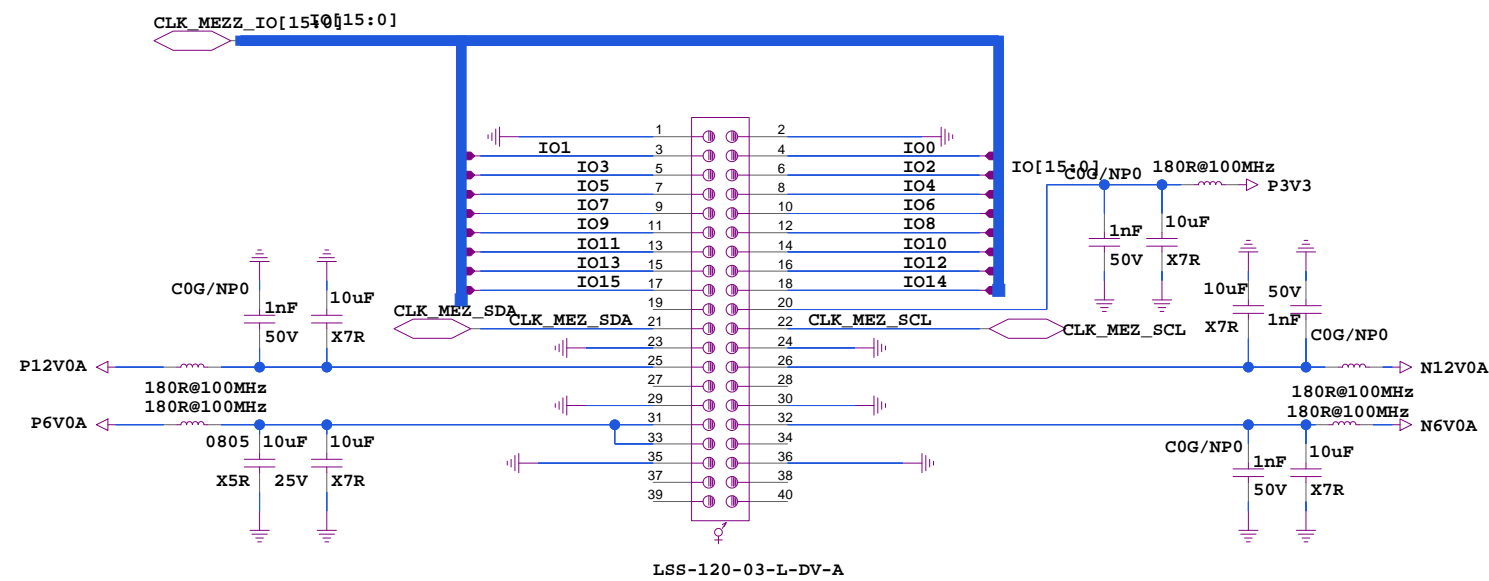
ARTIQ Sayma

SIZE A3	DWG NO	REV v0.9
1		
DRAWN BY G.K.	SHEET 2	of 18
2016/11/03:23:13:59		

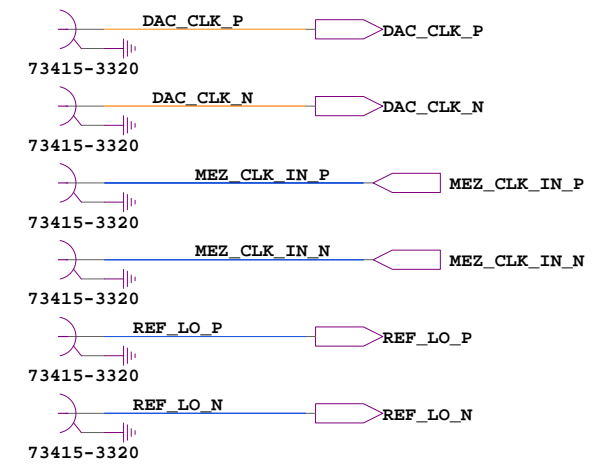


ARTIQ Sayma

SIZE A3	DWG NO.	REV v0.9
DRAWN BY G.K.	SHEET 3	OF 18
2016/11/03:23:14:00		



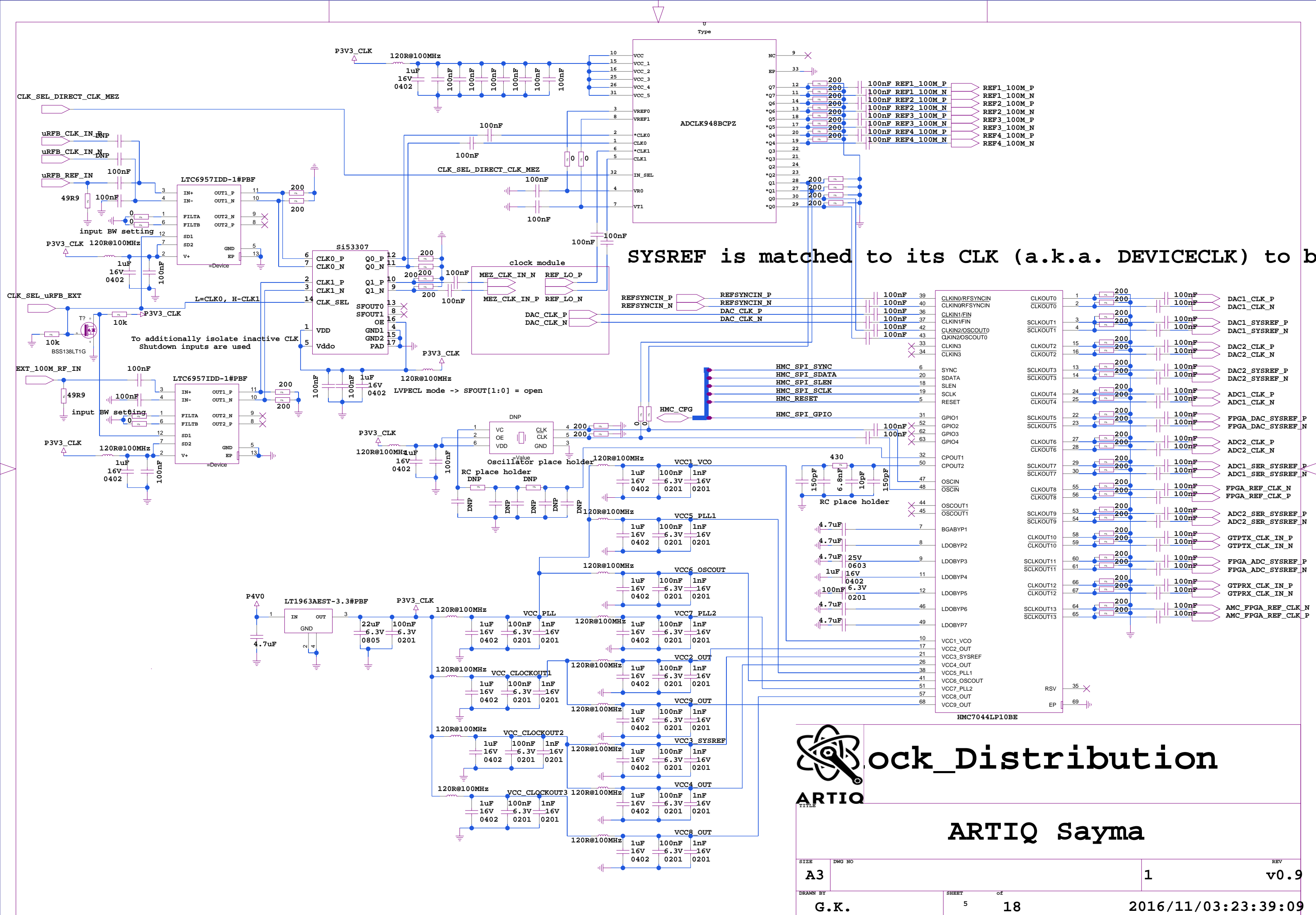
+12VDC @ 200 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
-12VDC @ 50 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
+6VDC @ 1.5 A, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
-6VDC rail @ 100 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
+3.3VDC @ 1 A, max 10 mV p-p noise in 20 Hz-20 MHz



ARTIQ Sayma

CLK_Mezzanine

SIZE	DWG NO	SHEET	OF	REV
A3		4	18	v0.9
DRAWN BY		2016/11/03:23:14:02		
G.K.				



IOVDD=3.3

Replace with W2L16C473MAT1S

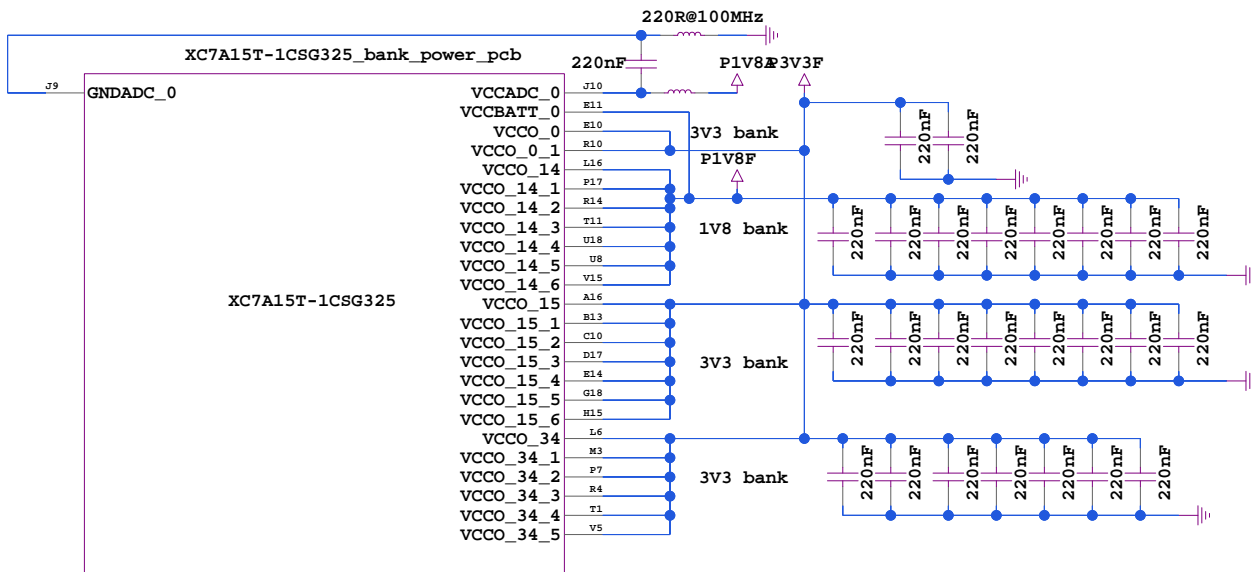
Replace with W2L16C473MAT1S



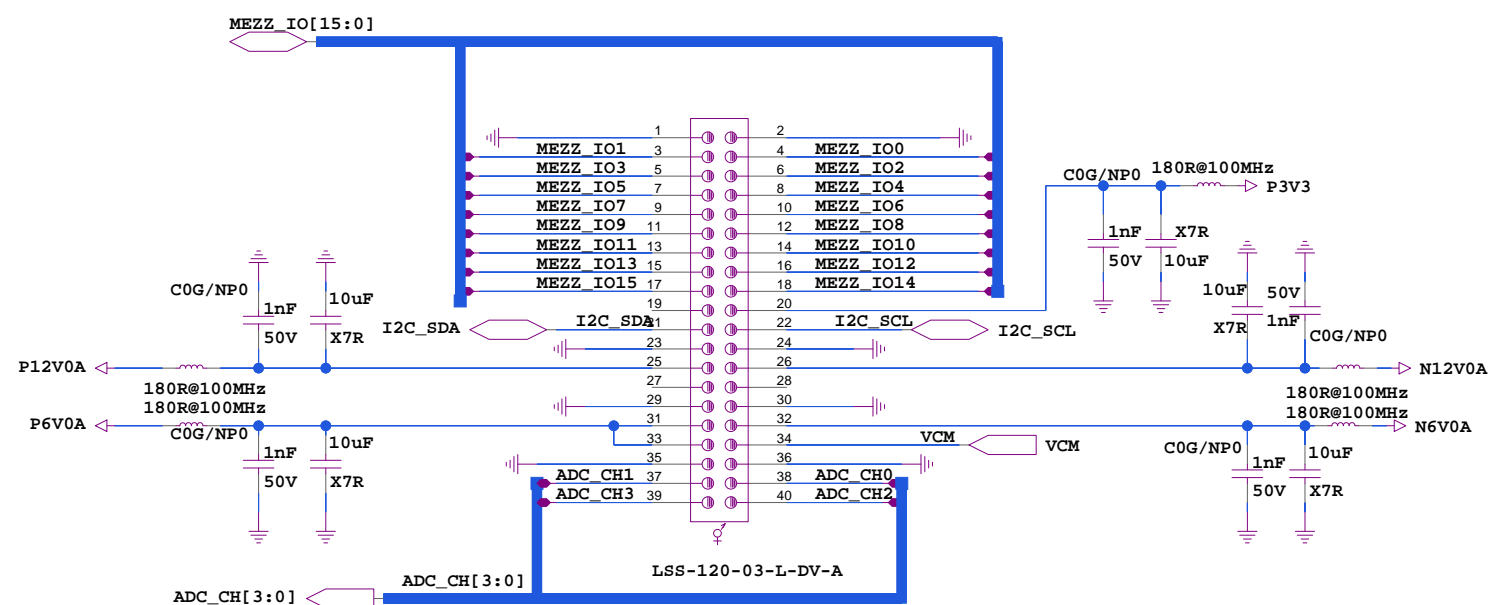
ARTIQ Sayma

DAC_JESD204B

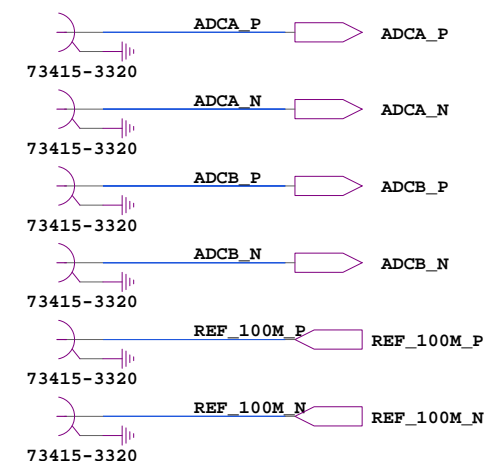
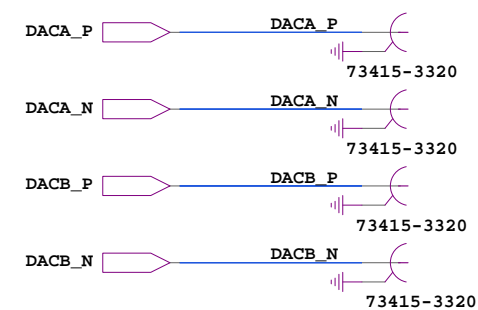
SIZE	DWG NO	REV
A3		1
DRAWN BY	SHEET OF	v0.9
G.K.	6 18	2016/11/03:23:13:59



FPGA_7A15T_POWER



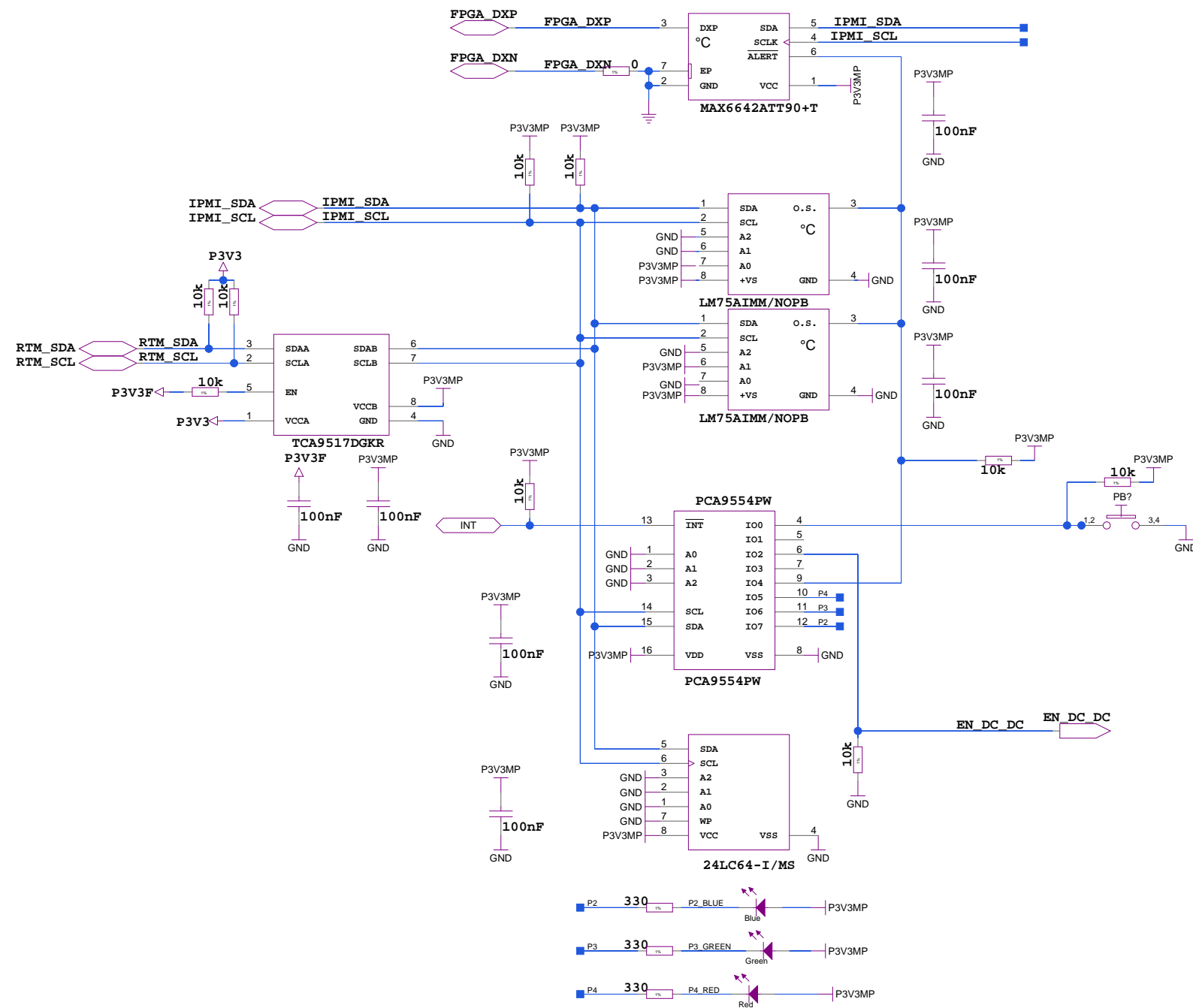
+12VDC @ 200 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 -12VDC @ 50 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 +6VDC @ 1.5 A, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 -6VDC rail @ 100 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 +3.3VDC @ 1 A, max 10 mV p-p noise in 20 Hz-20 MHz



ADC_DAC_AFE Mezzanine

ARTIQ Sayma

SIZE	DWG NO	SHEET	OF	REV
A3		9	18	v0.9
DRAWN BY	2016/11/03:23:14:00			
G.K.				



ARTIQ Sayma

RTM_IPMI

SIZE
A3

DWG NO

DRAWN BY
G.K.

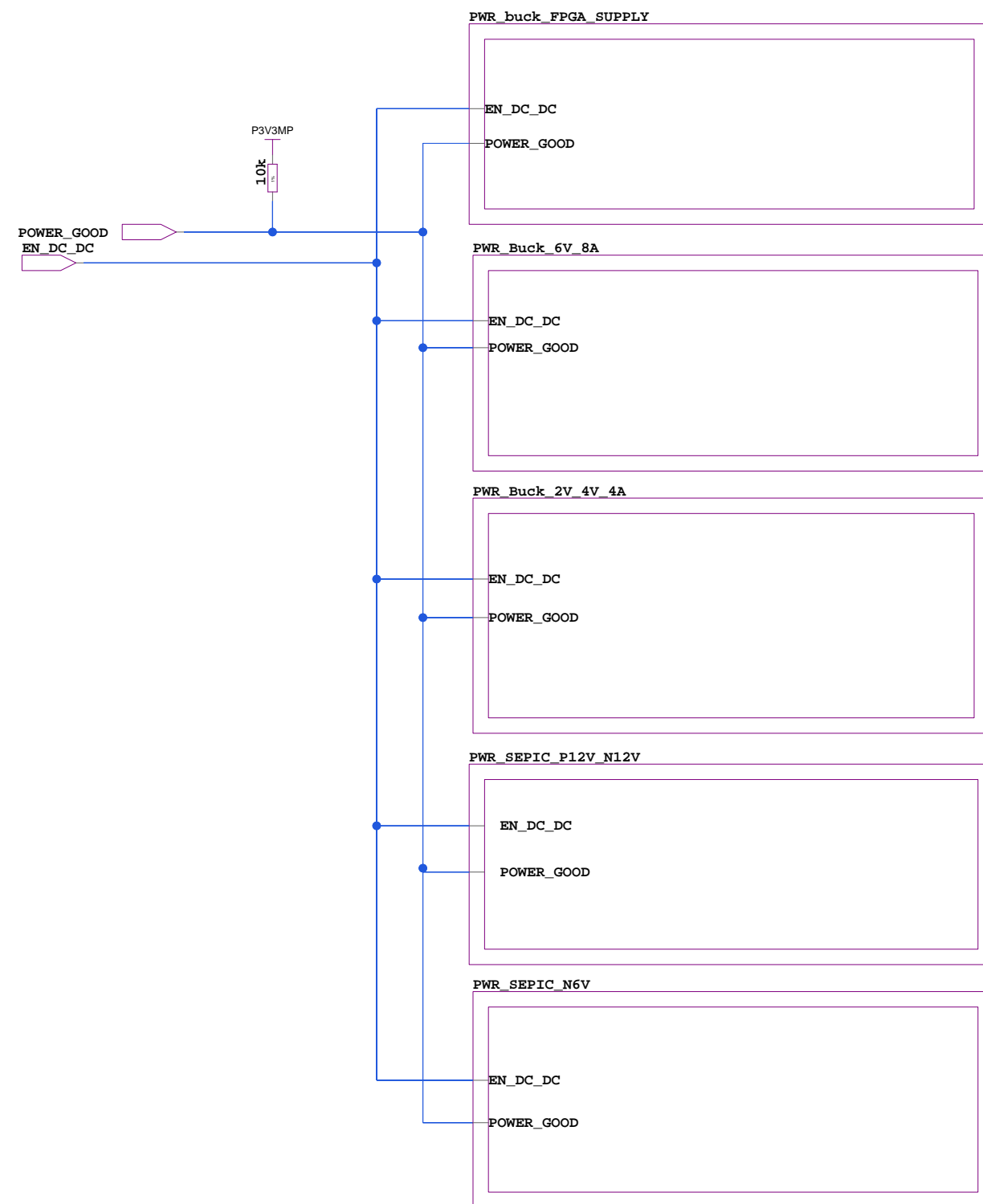
SHEET
10

OF
18

1

REV
v0.9

2016/11/03:23:14:29

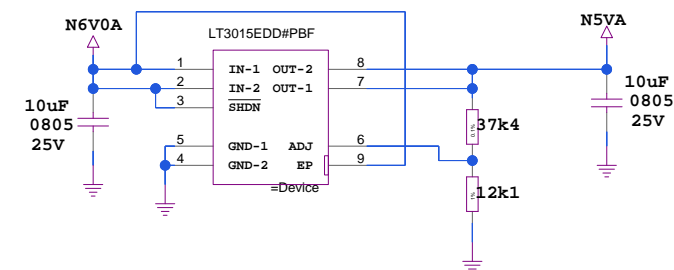
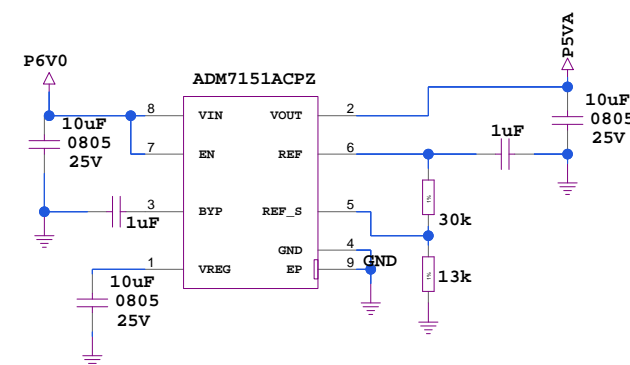
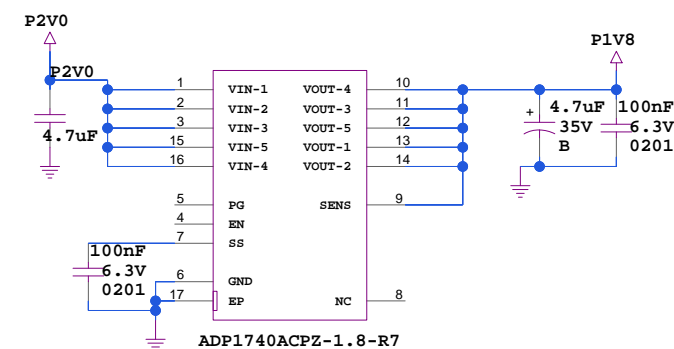



RTM modules power requirements

- +12VDC @ 1A, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
- 12VDC @ 250 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
- +6VDC @ 8 A, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
- 6VDC rail @ 750 mA,max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
- +3.3VDC @ 4 A, max 10 mV p-p noise in 20 Hz-20 MHz

RTM power requirements

- +4VDC @ 4 A, max 10 mV p-p noise in 20 Hz-20 MHz
- +2VDC @ 4 A, max 10 mV p-p noise in 20 Hz-20 MHz

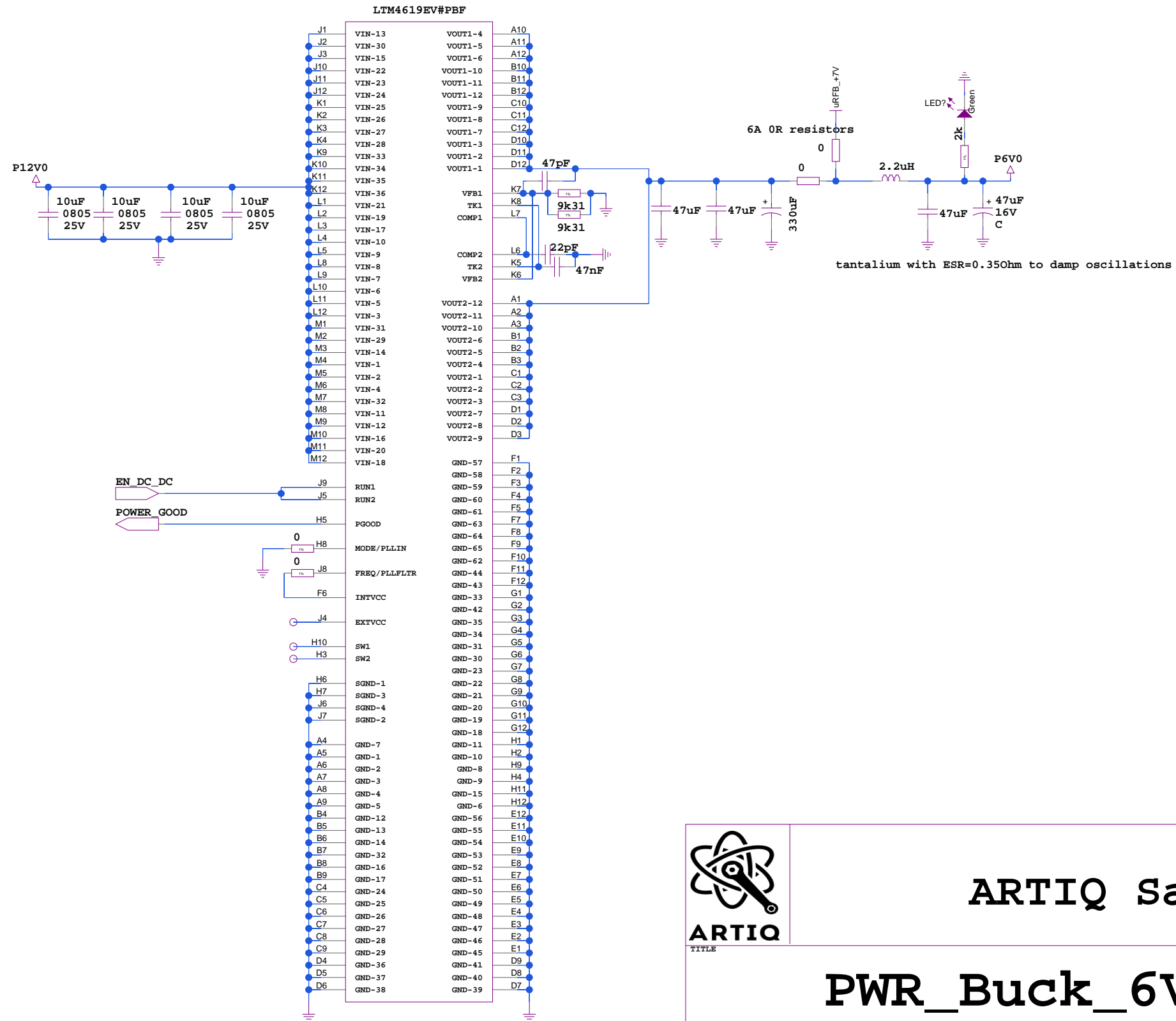




ARTIQ Sayma

RTM_POWER_SUPPLY

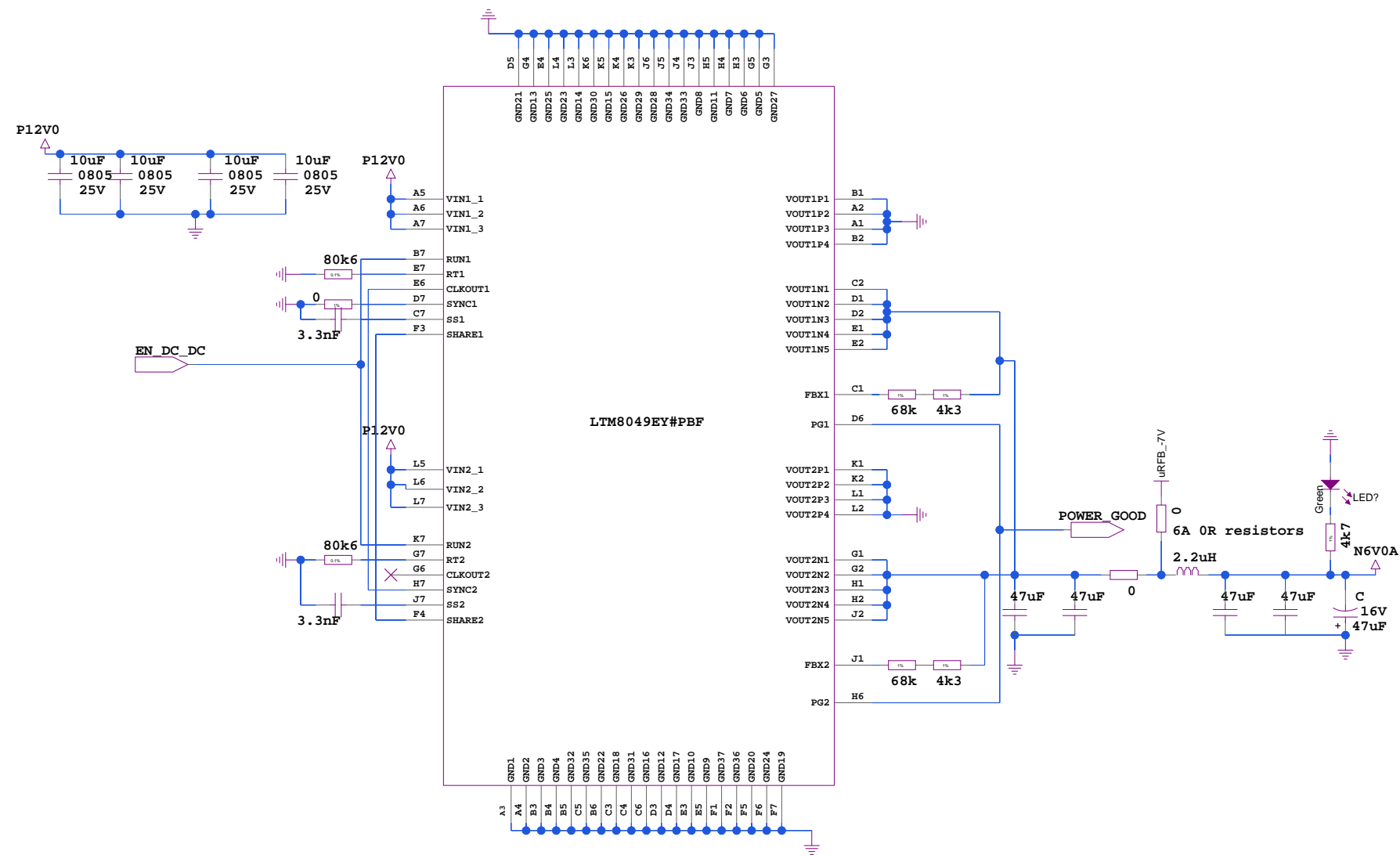
SIZE	DWG NO	1	REV	v0.9
A3				
DRAWN BY	SHEET	OF		
G.K.	11	18	2016/11/03:23:14:01	



ARTIQ Sayma

PWR_Buck_6V_8A

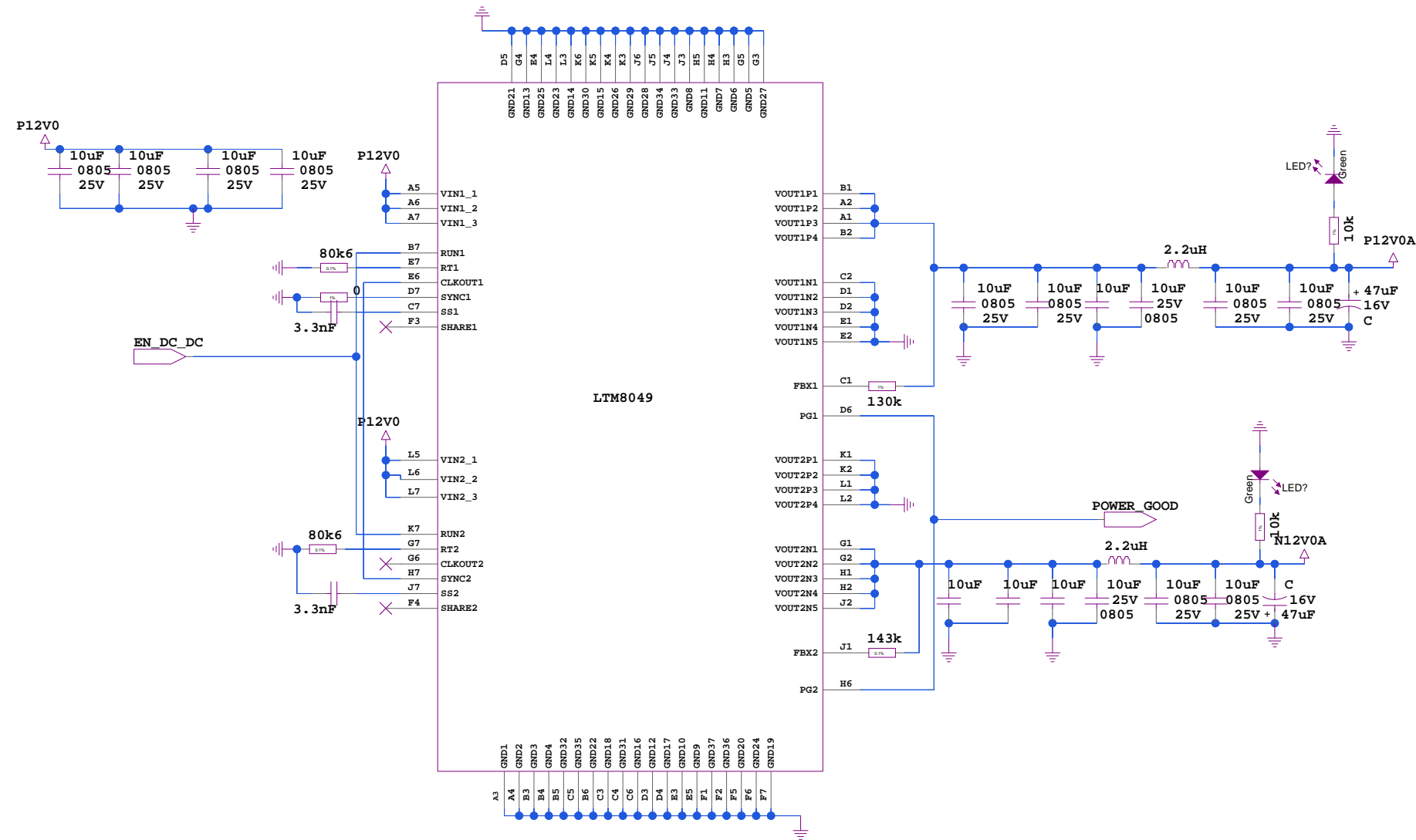
SIZE	DWG NO	REV
A3		1
DRAWN BY	SHEET	OF
G.K.	13	18
2016/11/03:23:14:02		



ARTIQ Sayma

PWR_SEPIC_N6V

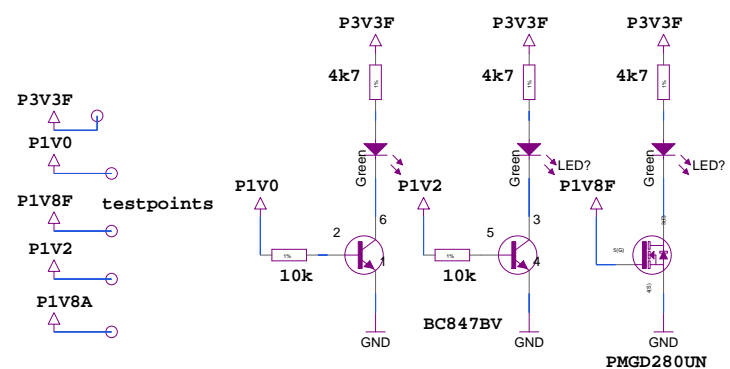
SIZE	DWG NO	REV
A3		1 v0.9
DRAWN BY	SHEET	OF
G.K.	14	18
2016/11/03:23:14:02		



ARTIQ Sayma

PWR_SEPIC_P12V_N12V

SIZE	DWG NO	REV
A3	1	v0.9
DRAWN BY	SHEET OF	
G.K.	15 18	2016/11/03:23:14:02



TITLE

ARTIQ Sayma

PWR_buck_FPGA_SUPPLY

SIZE
A3

DWG NO

1

REV
v0.9

DRAWN BY

G.K.

SHEET
16

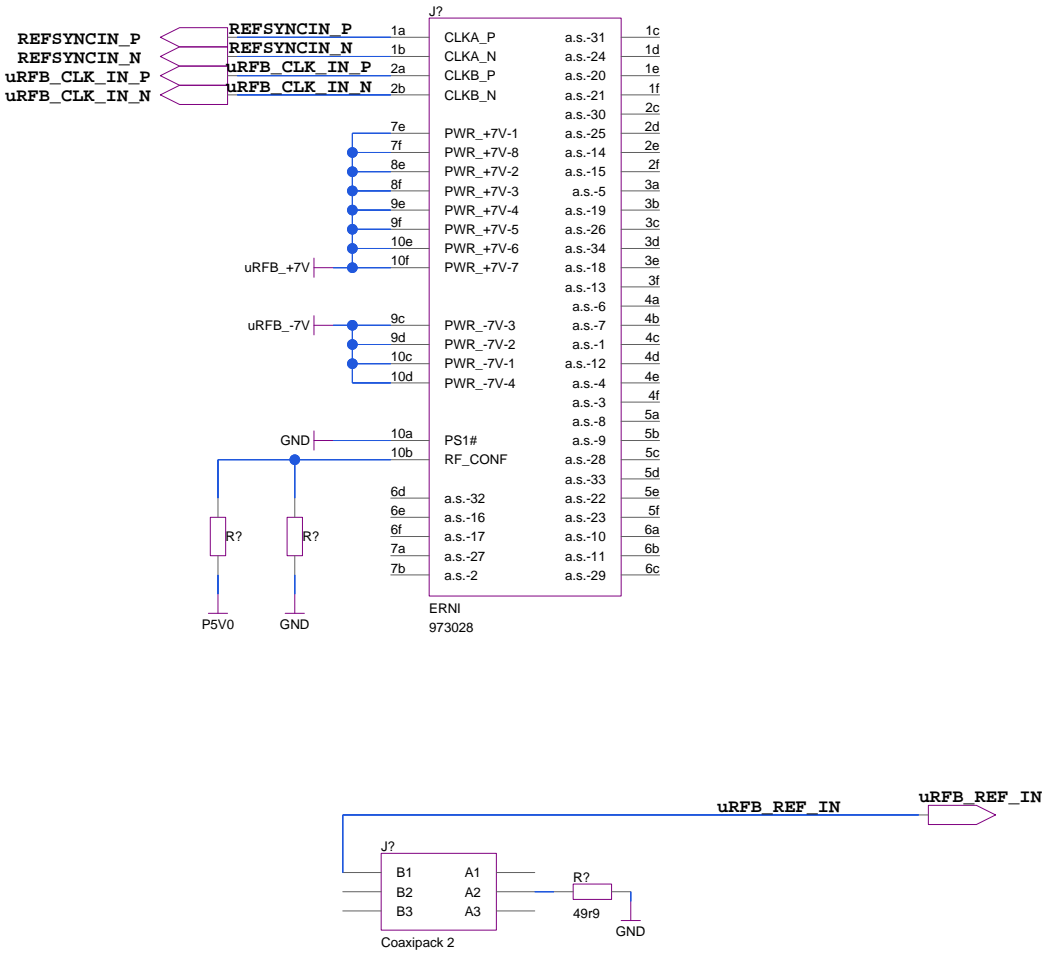
of
18


2016/11/03:23:14:02



SI5324_CLK_RECOVERY

2016/11/03:23:14:00

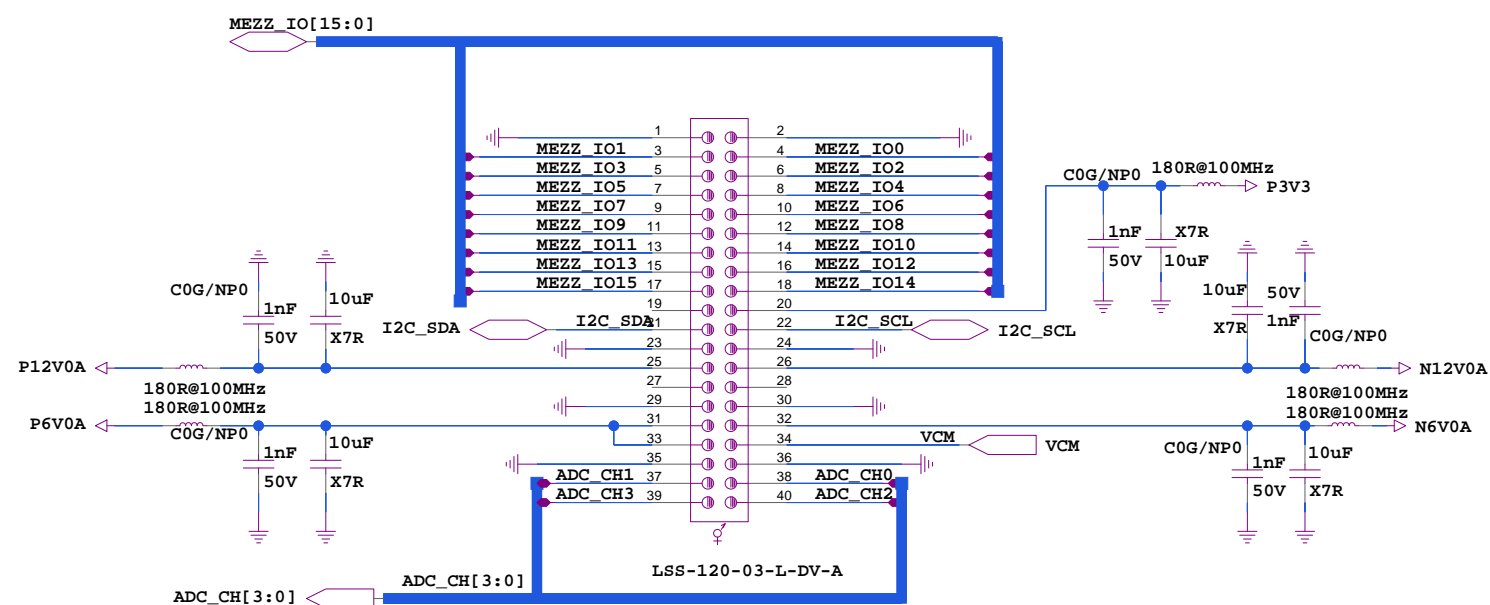




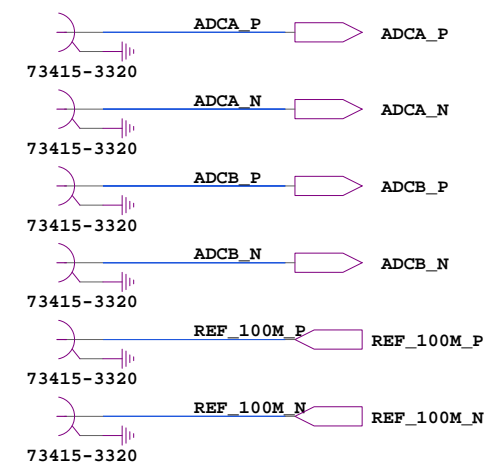
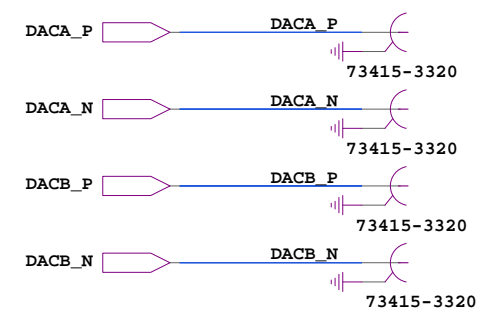
uRFB_Connectors

ARTIQ Sayma

SIZE	DWG NO	REV
A3		1 v0.9
DRAWN BY	SHEET OF	
G.K.	18 18	2016/11/03:23:14:01



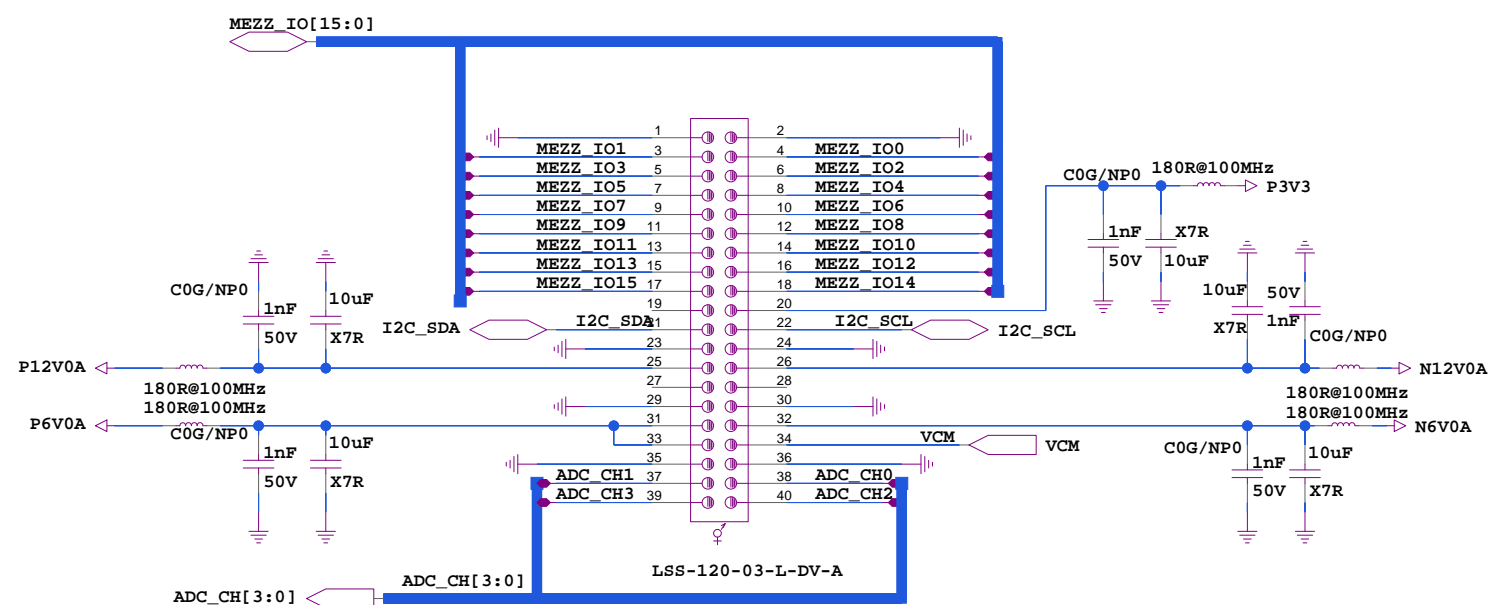
+12VDC @ 200 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 -12VDC @ 50 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 +6VDC @ 1.5 A, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 -6VDC rail @ 100 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 +3.3VDC @ 1 A, max 10 mV p-p noise in 20 Hz-20 MHz



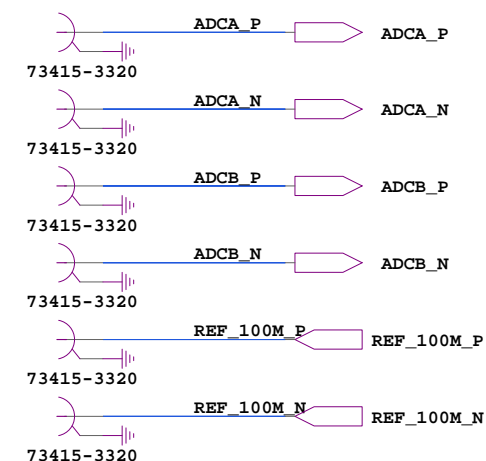
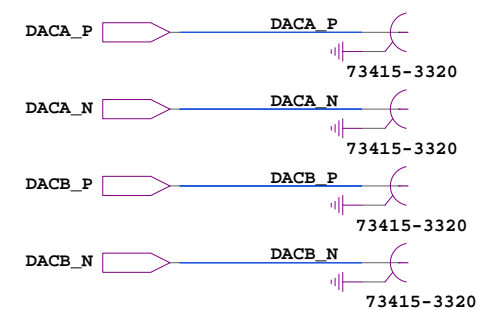
ADC_DAC_AFE Mezzanine

ARTIQ Sayma

SIZE	DWG NO	SHEET	OF	REV
A3		1	18	v0.9
DRAWN BY	2016/11/03:23:14:00			
G.K.				



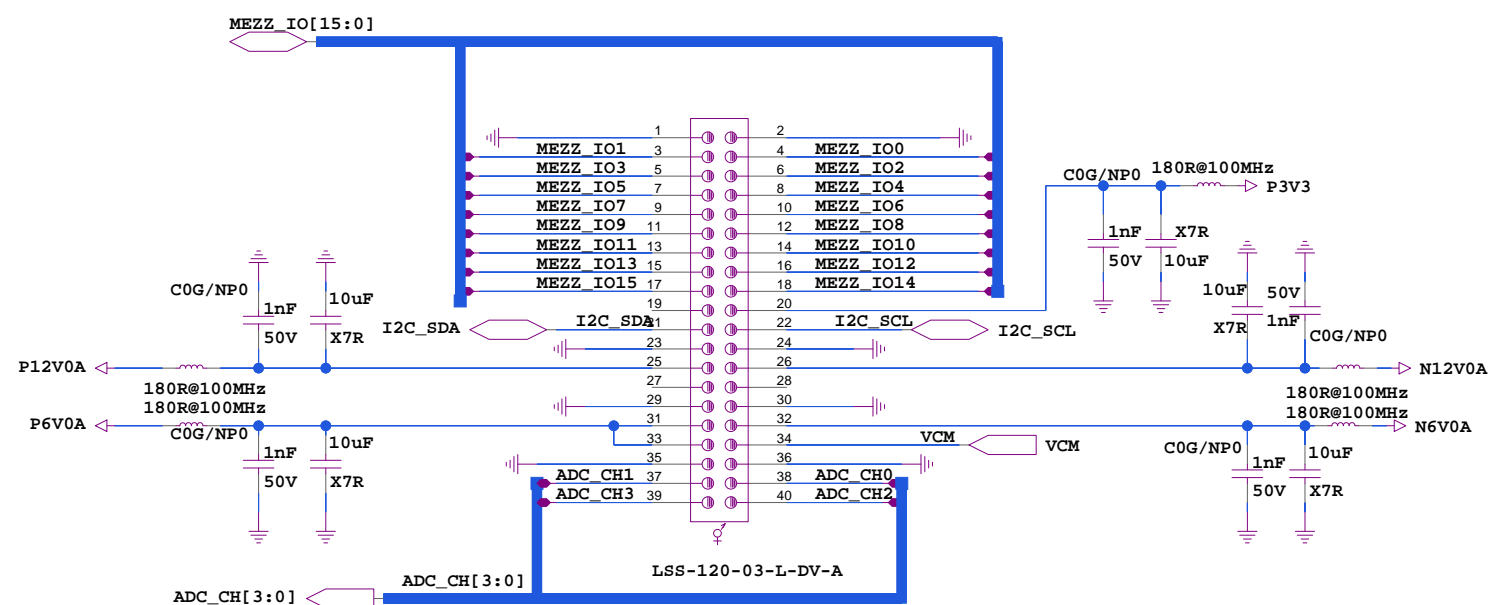
+12VDC @ 200 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 -12VDC @ 50 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 +6VDC @ 1.5 A, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 -6VDC rail @ 100 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 +3.3VDC @ 1 A, max 10 mV p-p noise in 20 Hz-20 MHz



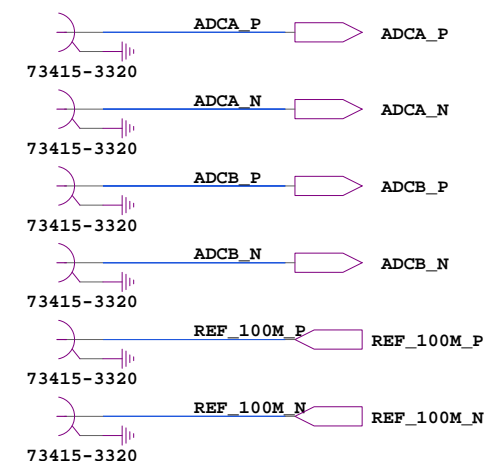
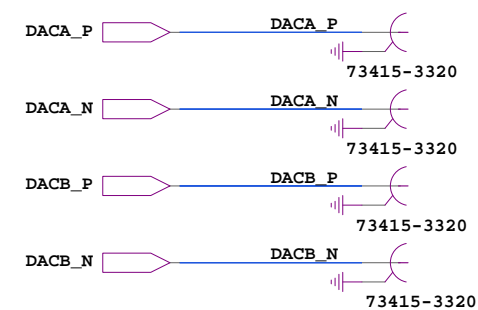
ADC_DAC_AFE Mezzanine

ARTIQ Sayma

SIZE	DWG NO	SHEET	OF	REV
A3		1	18	v0.9
DRAWN BY	2016/11/03:23:14:00			
G.K.				



+12VDC @ 200 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 -12VDC @ 50 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 +6VDC @ 1.5 A, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 -6VDC rail @ 100 mA, max 1 mV p-p noise in 20 Hz-20 MHz bandwidth
 +3.3VDC @ 1 A, max 10 mV p-p noise in 20 Hz-20 MHz



ADC_DAC_AFE Mezzanine

ARTIQ Sayma

SIZE	DWG NO	SHEET	OF	REV
A3		1	18	v0.9
DRAWN BY	2016/11/03:23:14:00			
G.K.				

IOVDD=3.3

Replace with W2L16C473MAT1S

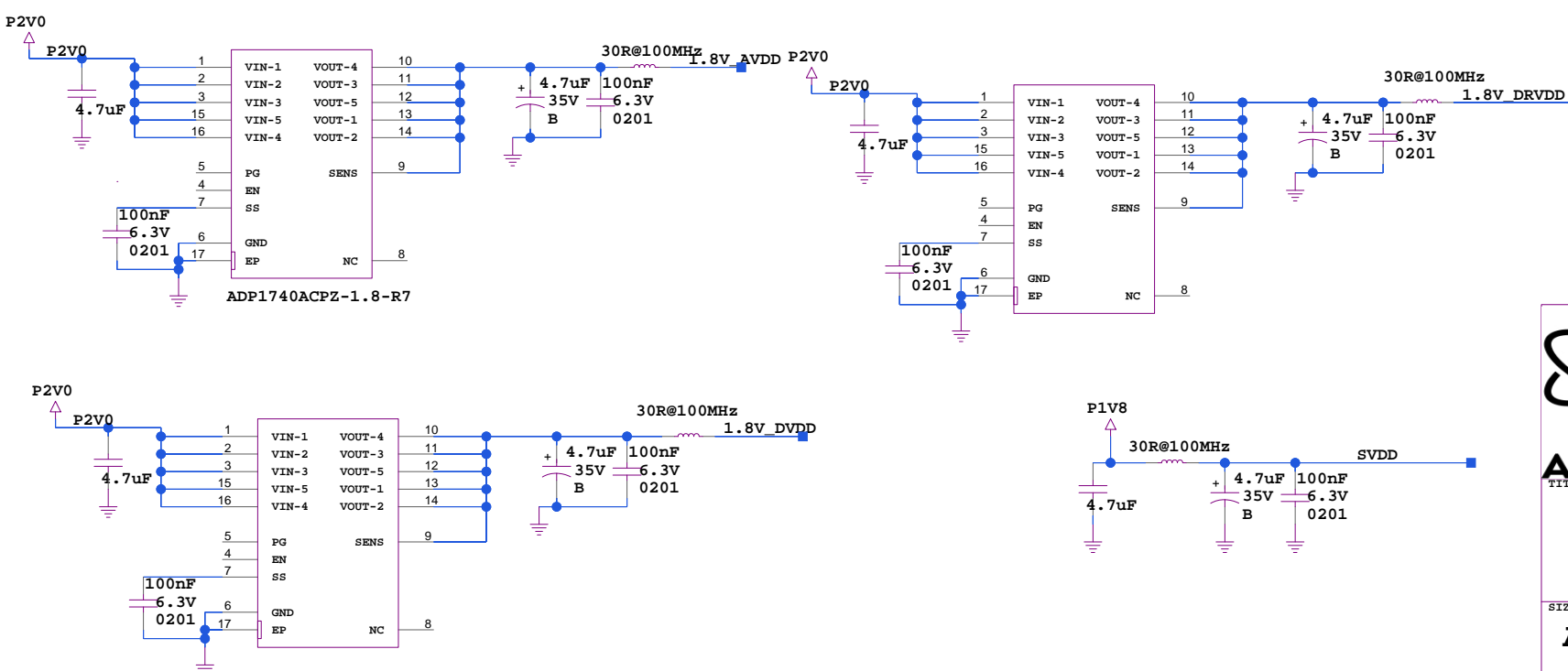
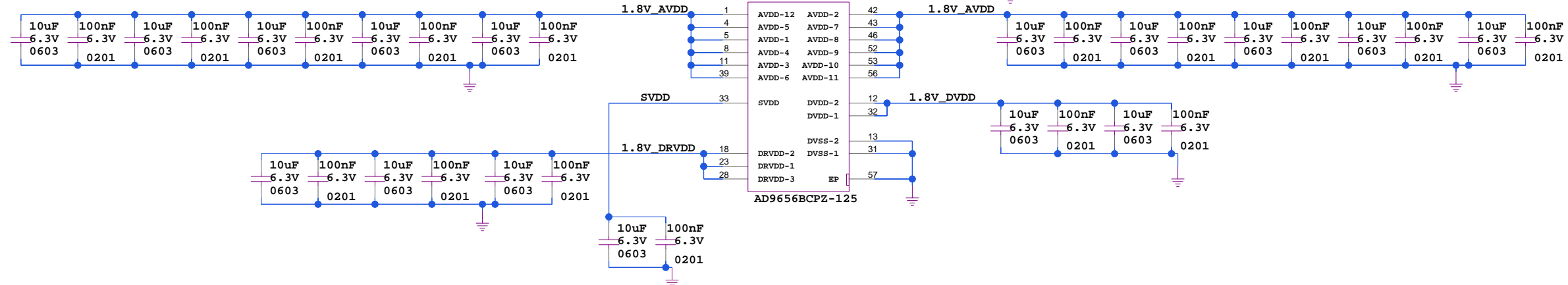
Replace with W2L16C473MAT1S



ARTIQ Sayma

DAC_JESD204B

SIZE	DWG NO	1	REV	v0.9
A3				
DRAWN BY	SHEET	OF		
G.K.	18			2016/11/03:23:13:59



ADC_JESD204B

ARTIQ Sayma

SIZE A3	DWG NO	REV v0.9
1		
DRAWN BY G.K.	SHEET 18	of 2016/11/03:23:13:59