

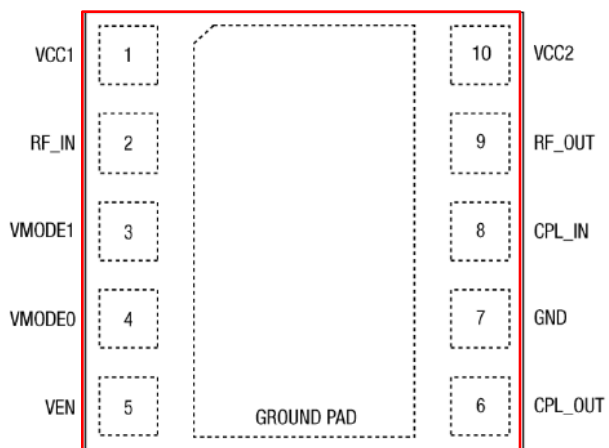
# ***SKY77758 Co-PCB analysis with SB 3x3 PA***

*Case from QB to SB*

2012.11.6



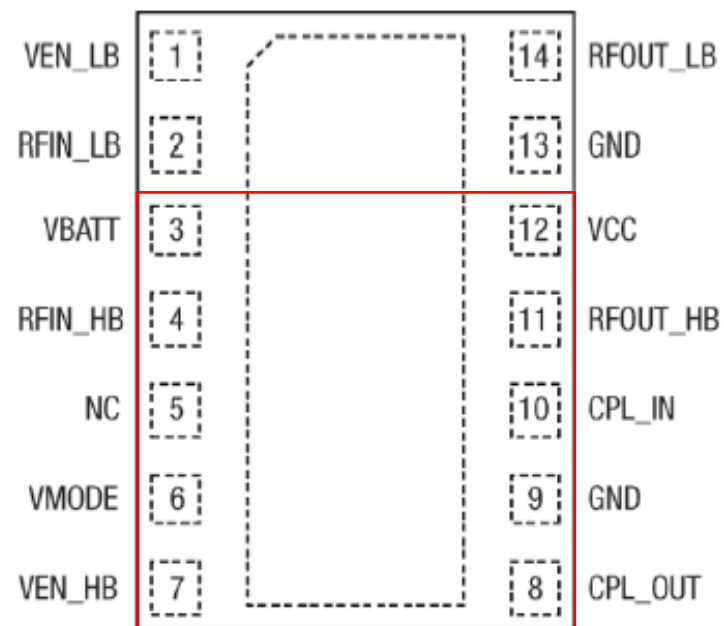
# SKY77758 MB PA is PTP with SB



Pad layout as seen from Top View looking through the package.  
GROUND PAD is package underside.

201706\_008

**Figure 8. SKY77761-11 Pad Names and Configuration (Top View)**



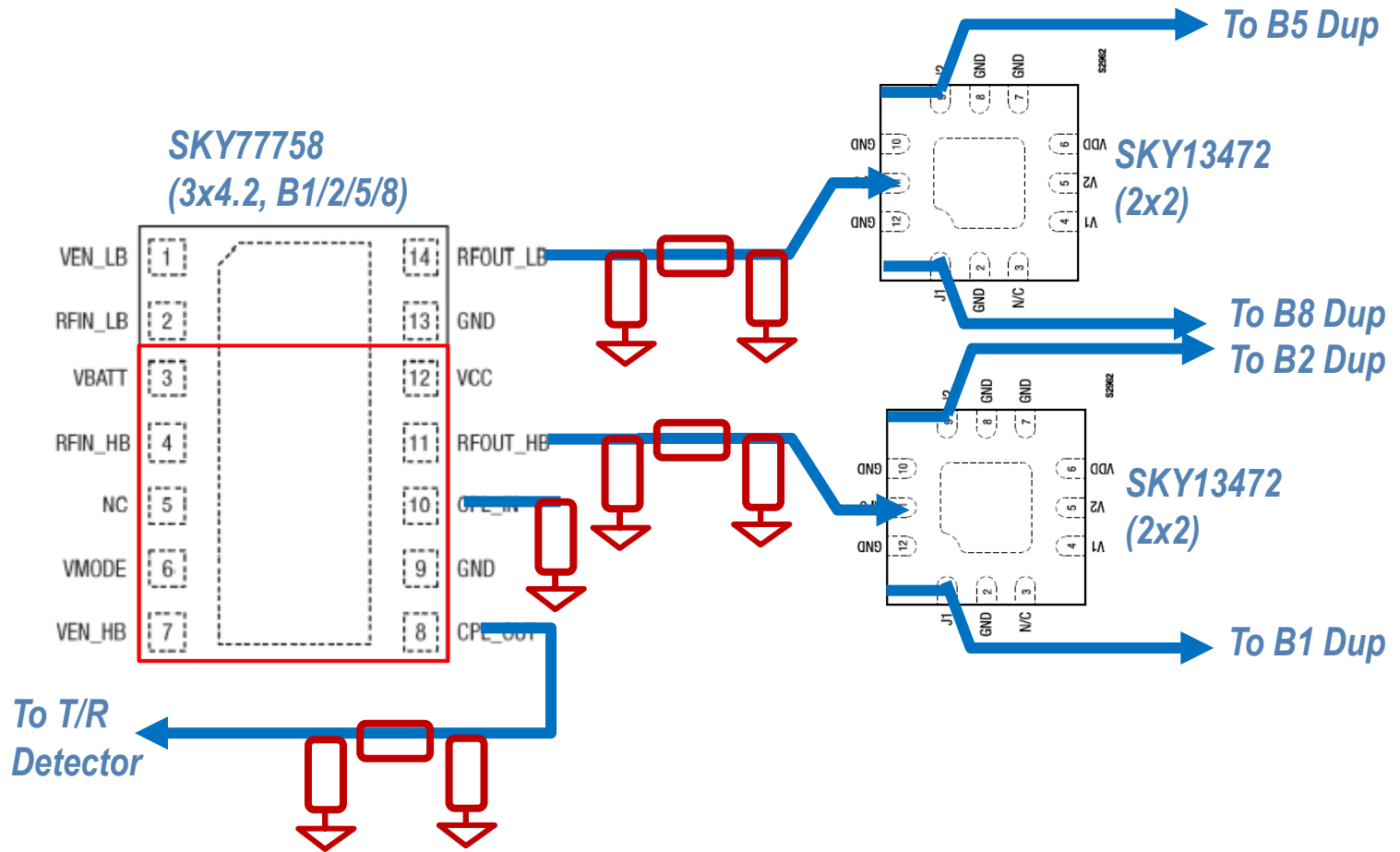
Pad layout as seen from Top View looking through the package

201929\_006

**Figure 6. SKY77758 14-pad Configuration and Pad Names (Top View)**

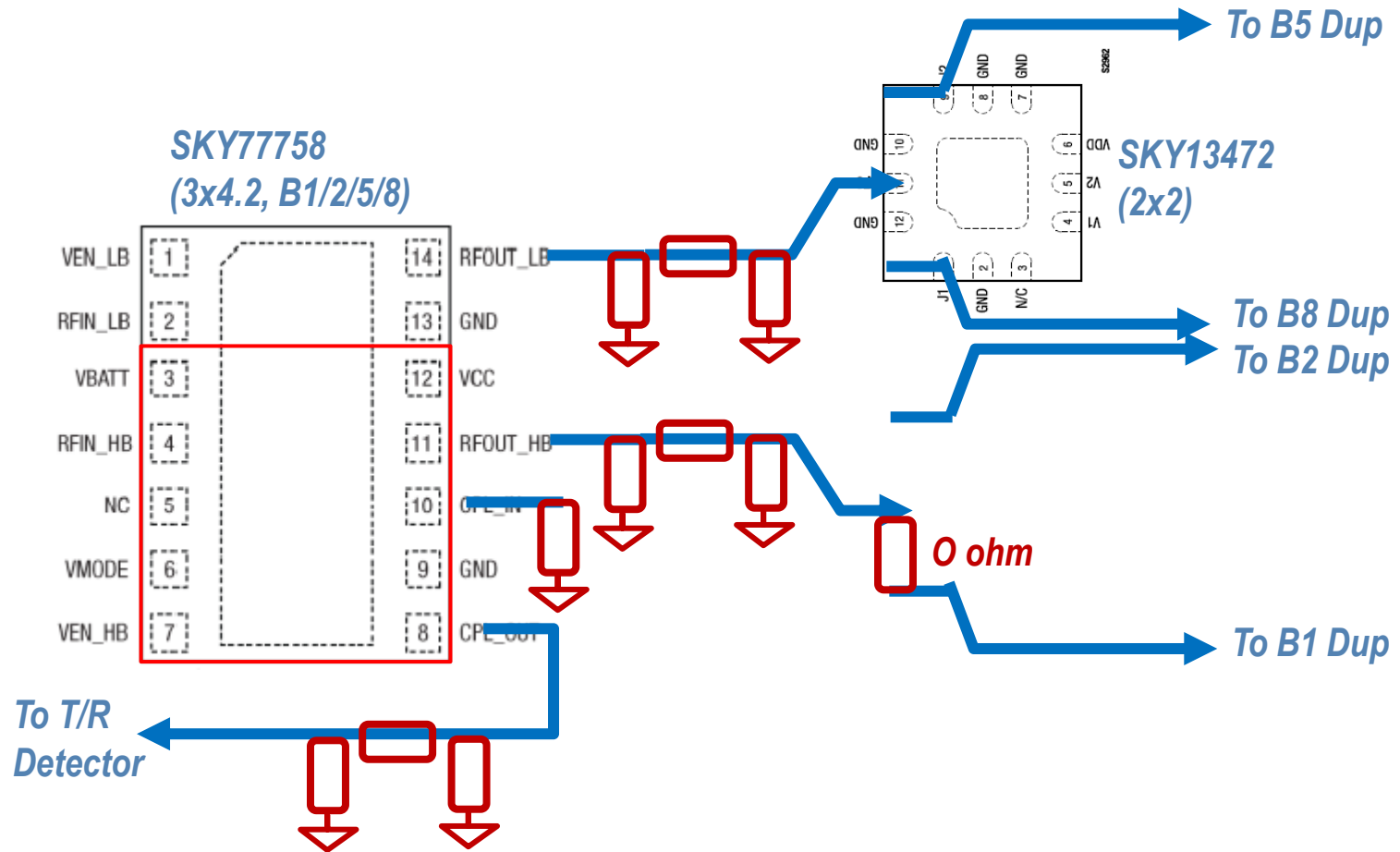
# SKY77758 support QB case analysis

B1/2/5/8



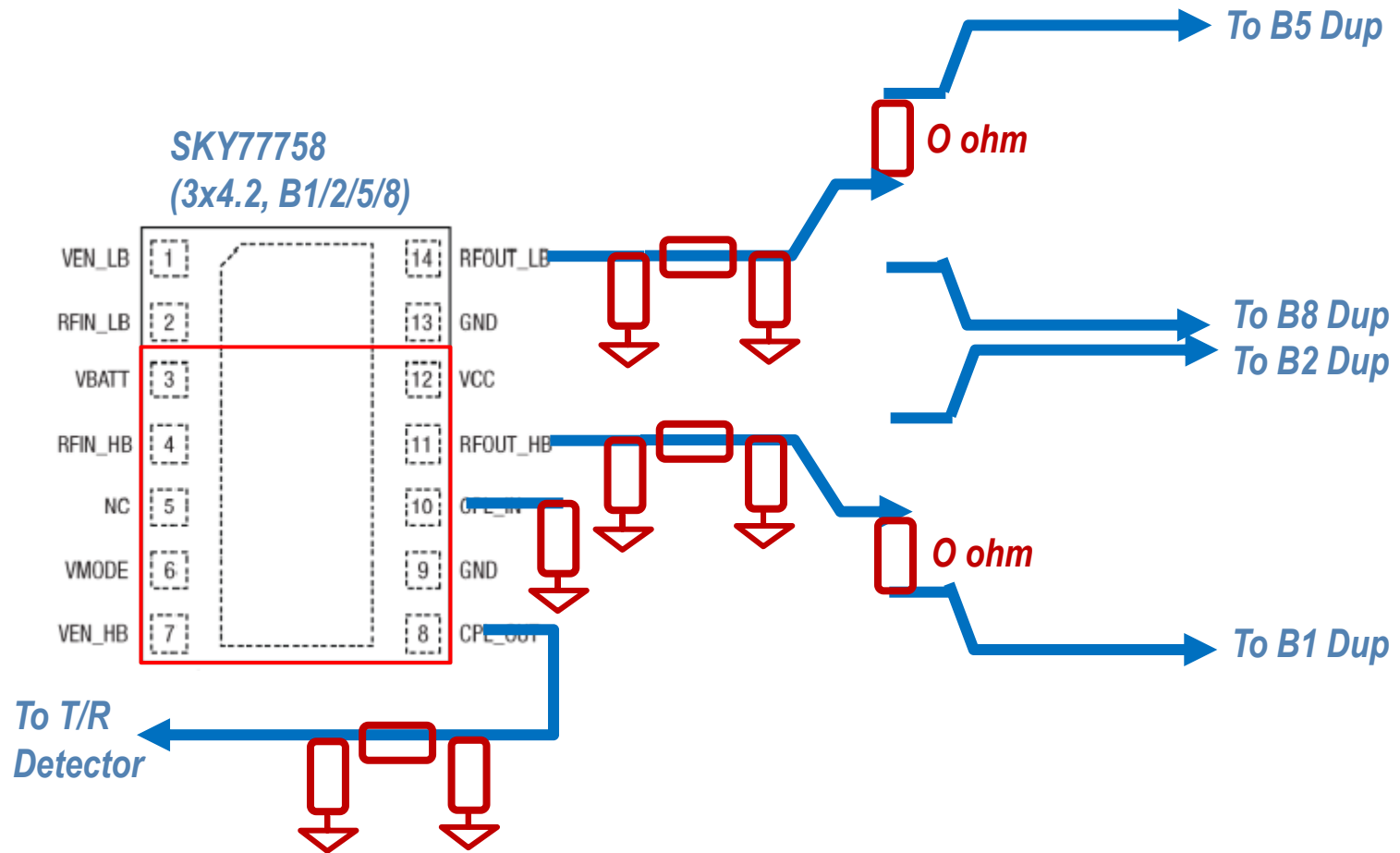
# SKY77758 support TB case analysis

B1/5/8



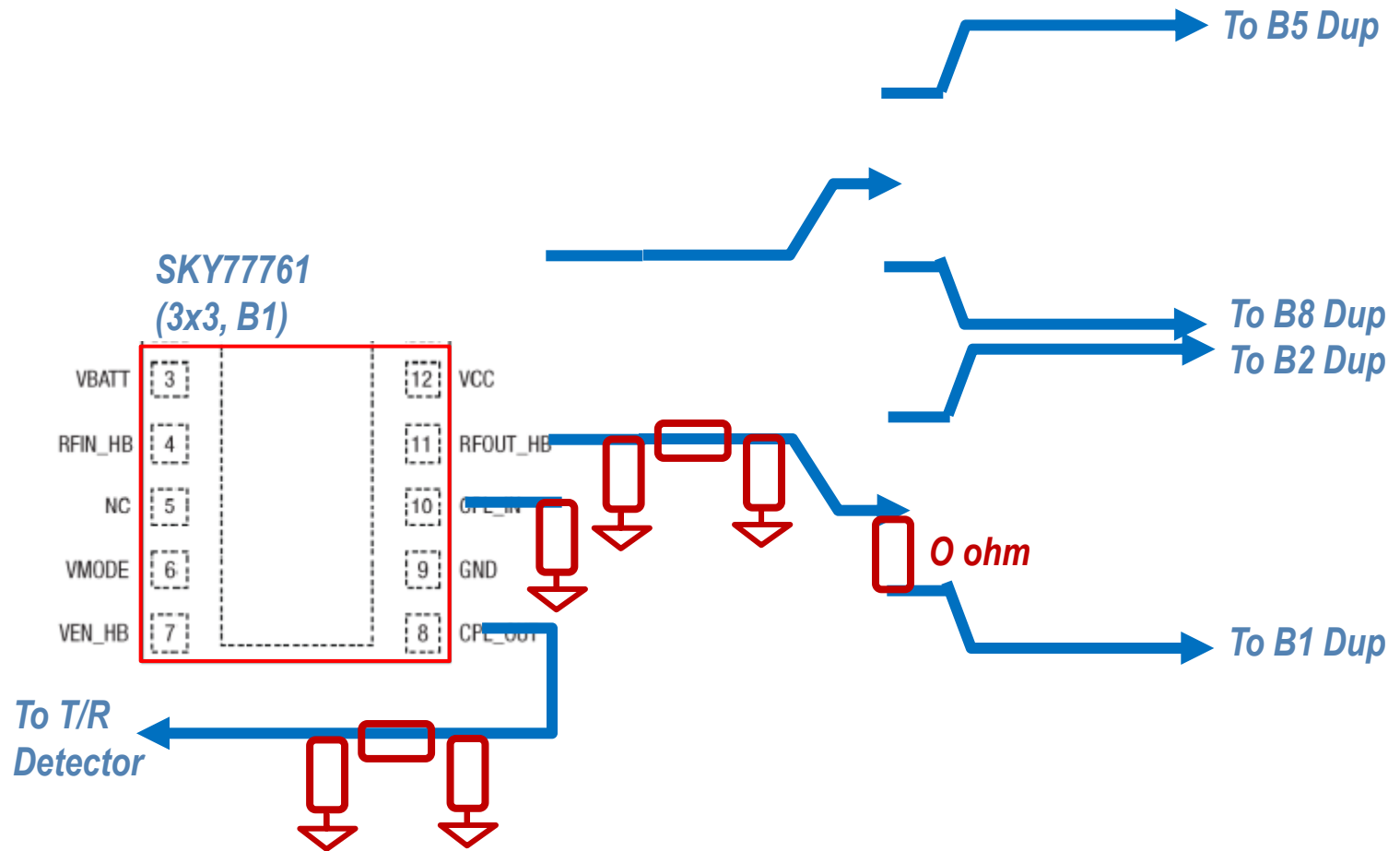
# SKY77758 support DB case analysis

B1/8



# SKY77761 support SB case analysis

B1



# Pmax Performance

25C, 3.4V



Mode	PRODUCT	SERIALNUMBER	TEMP	FREQ	MOD	POUT	GAIN	ITOT	ICQ_TOT	PAE	FOM	ACP1_MAX	ACP2_MAX	2FO	3FO	CF
			° C	MHZ		dBm	dB	mA	mA	%		dBc	dBc	dBc	dBc	dB
HPM	77758	STR22489-OM-SN15	25	824	STC1	28	28.67	473.73	113.21	39.16	81.87	-42.71	-56.50	-46.35	-63.88	21.99
	77758	STR22489-OM-SN15	25	836.5	STC1	28	28.39	479.43	113.28	38.75	82.44	-43.69	-56.92	-45.57	-68.03	21.77
	77758	STR22489-OM-SN15	25	849	STC1	28	28.39	471.23	113.39	39.27	83.74	-44.47	-58.55	-45.07	-73.25	21.74
	77758	STR22489-OM-SN15	25	880	STC1	28.5	27.50	490.34	113.47	42.46	86.59	-44.13	-56.51	-44.61	-72.12	21.45
	77758	STR22489-OM-SN15	25	897.5	STC1	28.5	27.11	484.88	113.52	43.08	86.60	-43.53	-56.23	-44.31	-69.79	21.25
	77758	STR22489-OM-SN15	25	915	STC1	28.5	26.99	477.53	113.46	43.80	86.11	-42.31	-55.63	-44.30	-68.56	21.08
	77758	STR22489-OM-SN15	25	1850	STC1	28.5	28.16	470.73	78.50	43.93	87.56	-43.63	-57.71	-43.00	-69.01	22.29
	77758	STR22489-OM-SN15	25	1880	STC1	28.5	28.35	466.20	78.39	44.44	89.16	-44.72	-57.73	-42.00	-70.43	22.13
	77758	STR22489-OM-SN15	25	1910	STC1	28.5	28.53	460.28	78.33	44.98	88.83	-43.86	-57.18	-41.20	-67.84	21.99
	77758	STR22489-OM-SN15	25	1920	STC1	28	28.57	431.45	78.36	42.75	89.62	-46.87	-59.09	-40.79	-70.48	21.94
	77758	STR22489-OM-SN15	25	1950	STC1	28	28.82	431.53	78.39	42.84	86.42	-43.58	-58.88	-40.27	-71.05	21.77
	77758	STR22489-OM-SN15	25	1980	STC1	28	28.82	430.02	78.50	42.92	84.53	-41.61	-58.46	-40.30	-66.03	21.66
LPM	77758	STR22489-OM-SN15	25	824	STC1	17	26.68	141.81	64.00	10.38	52.46	-42.07	-66.77	-47.14	-68.70	21.99
	77758	STR22489-OM-SN15	25	836.5	STC1	17	26.48	142.70	64.00	10.33	52.96	-42.63	-67.24	-46.25	-70.30	21.74
	77758	STR22489-OM-SN15	25	849	STC1	17	26.45	140.55	63.93	10.48	53.86	-43.39	-67.82	-45.77	-71.32	21.73
	77758	STR22489-OM-SN15	25	880	STC1	17	25.68	138.18	64.02	10.71	55.39	-44.68	-68.75	-45.11	-73.05	21.42
	77758	STR22489-OM-SN15	25	897.5	STC1	17	25.35	135.55	64.00	10.79	56.07	-45.27	-69.03	-44.93	-74.12	21.28
	77758	STR22489-OM-SN15	25	915	STC1	17	25.19	133.68	63.97	11.00	56.47	-45.47	-68.95	-43.75	-73.69	21.10
	77758	STR22489-OM-SN15	25	1850	STC1	17	24.14	130.88	40.90	11.19	50.56	-39.38	-62.43	-42.08	-66.16	22.28
	77758	STR22489-OM-SN15	25	1880	STC1	17	24.52	129.75	40.87	11.38	51.54	-40.17	-62.12	-41.13	-68.16	22.10
	77758	STR22489-OM-SN15	25	1910	STC1	17	24.89	127.40	40.87	11.58	52.31	-40.74	-62.08	-40.28	-69.89	22.01
	77758	STR22489-OM-SN15	25	1920	STC1	17	25.04	126.72	40.83	11.62	52.66	-41.04	-61.98	-40.13	-69.79	21.92
	77758	STR22489-OM-SN15	25	1950	STC1	17	25.33	125.48	40.79	11.79	53.38	-41.59	-61.70	-39.27	-70.34	21.76
	77758	STR22489-OM-SN15	25	1980	STC1	17	25.69	122.77	40.80	12.00	54.38	-42.38	-62.12	-38.74	-69.76	21.68

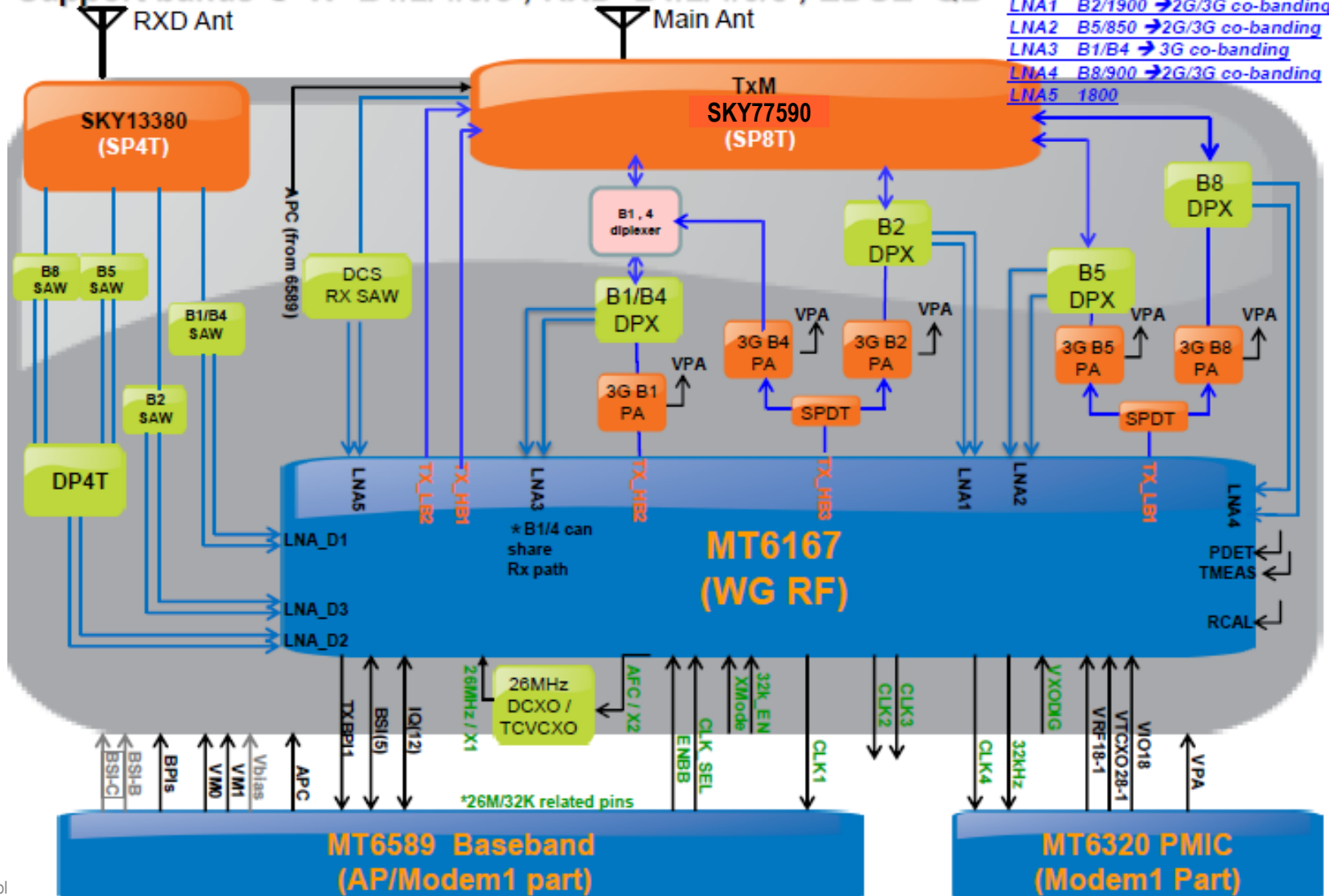
# MT6167 diagram with SB PA for PB supporting

## Need 2ea external pre-PA SPDT

### RF Front End Block Diagrams : (MT6167 RF SEVB , WS1940-1)

Support bands → W=B1/2/4/5/8 ; RXD=B1/2/4/5/8 ; EDGE=QB

Note : Use RX Co-banding  
 LNA1 B2/1900 → 2G/3G co-banding  
 LNA2 B5/850 → 2G/3G co-banding  
 LNA3 B1/B4 → 3G co-banding  
 LNA4 B8/900 → 2G/3G co-banding  
 LNA5 1800





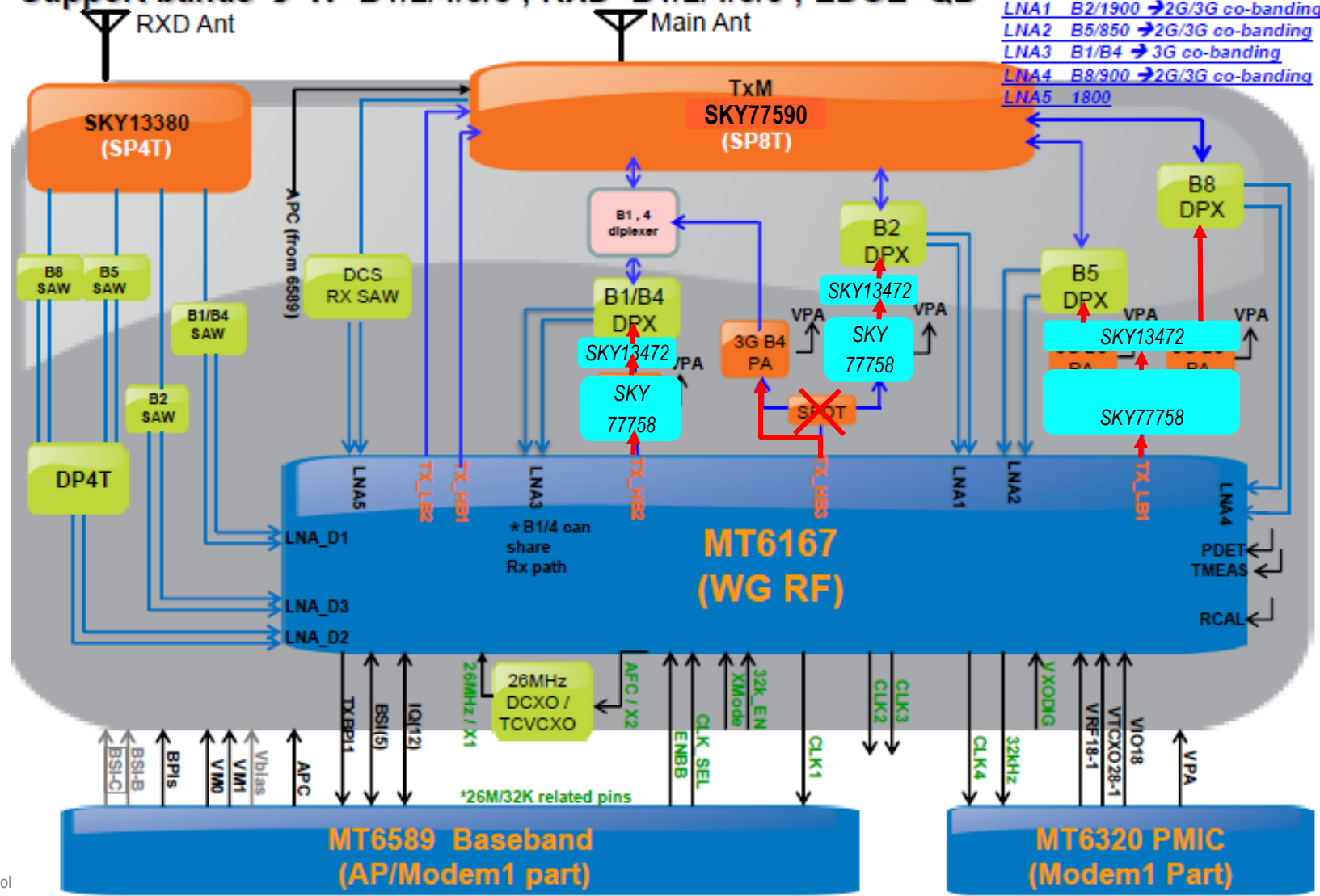
# MT6167 diagram with SKY77758 for PB supporting

## Eliminate 2ea external pre-PA SPDT

### RF Front End Block Diagrams : (MT6167 RF SEVB , WS1940-1)

Support bands → W=B1/2/4/5/8 ; RXD=B1/2/4/5/8 ; EDGE=QB

Note : Use RX Co-banding  
 LNA1 B2/1900 → 2G/3G co-banding  
 LNA2 B5/850 → 2G/3G co-banding  
 LNA3 B1/B4 → 3G co-banding  
 LNA4 B8/900 → 2G/3G co-banding  
 LNA5 1800



## 9.1 Tx Driver Mapping and Block Diagram

### Tx Mapping

Orion-FDD Name	Tx_OP	GSM850/900	B5/B6/B8	Notes
2GLB1	TX_LB1		✓	3G Path
2GLB2	TX_LB2	✓		2G Path

Orion-FDD Name	Tx_OP	GSM1800/1900	B1/B2/B3/B4/B11	Notes
2GHB1	TX_HB1	✓		2G Path
3GHB1	TX_HB2		✓	3G Path (use for B11)
3GHB2	TX_HB3		✓	3G Path