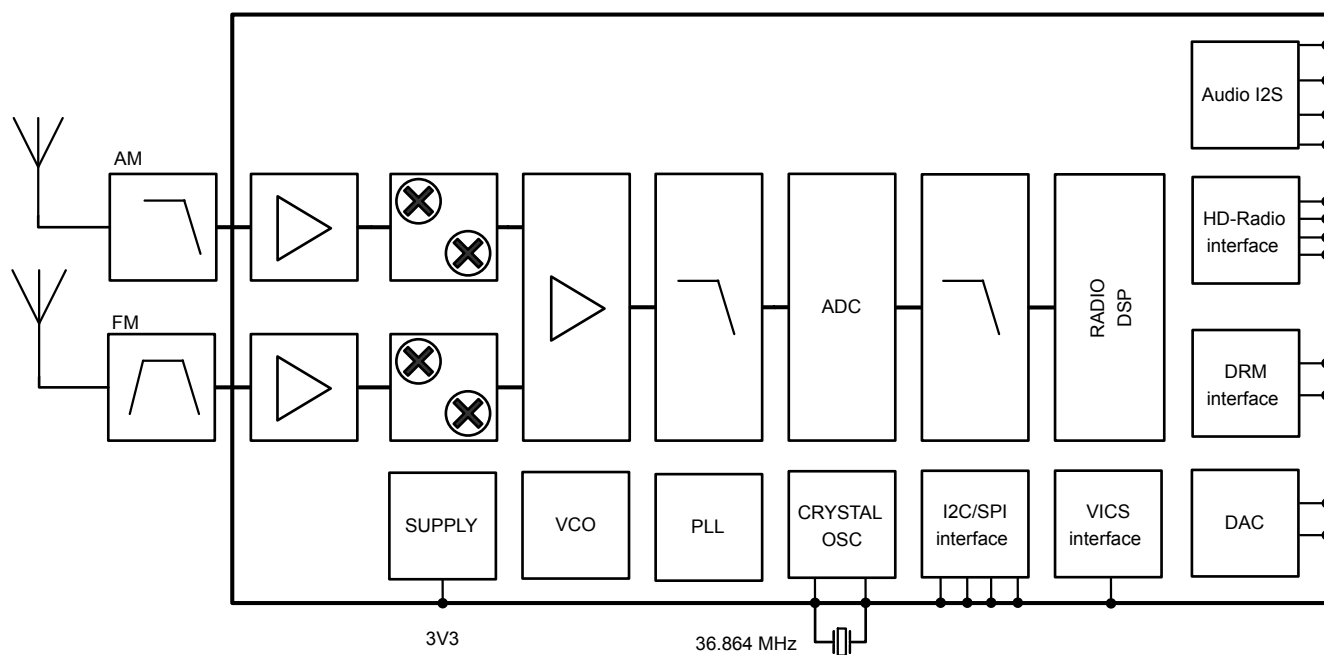


The TDA7708CB requires a very small FW code to be downloaded for booting the IC, thus making it especially suited to systems whose microcontroller has limited code storage capability.

1 Block diagram

Figure 1. Block diagram



2 Electrical specification

2.1 Absolute maximum ratings

Table 1. Absolute maximum ratings

Symbol	Parameter	Test condition	Min	Typ	Max	Units
V _{CC}	Abs. supply voltage	-	-0.5	-	3.6	V
T _{stg}	Storage temperature	-	-55	-	150	°C
V _{ESD}	ESD absolute minimum withstand voltage	Human Body model	> ±2000 ⁽¹⁾			V
		Charged device model	> ±500 ⁽²⁾			
		Charged device model, corner pins	> ±750			
-	Max. input current at any pin (latch-up characteristic)	I _{INMAX}	±100			mA

1. |±1000| on AM_IN pin

2. |±400| on AM_IN pin

2.2 Thermal data

Table 2. Thermal data

Symbol	Parameter	Test condition	Value	Units
R _{th j-amb}	Thermal resistance junction-to-ambient	Multilayer 2s2p as per JEDEC JESD51-7	27	°C/W

2.3 General key parameters

Table 3. General key parameters

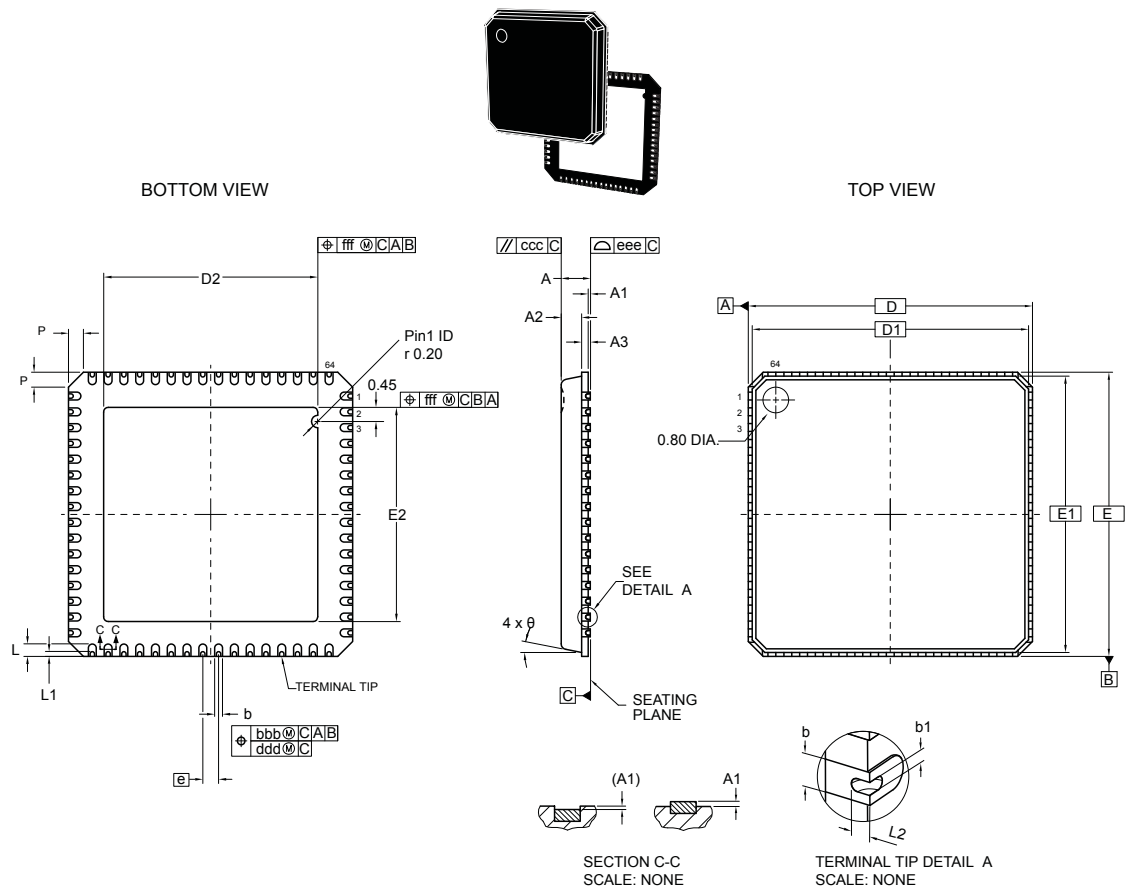
Symbol	Parameter	Test condition	Min	Typ	Max	Units
V _{CC}	3.3 V supply voltage	-	3.15	3.3	3.45	V
I _{CC}	Supply current	FM @108 MHz, active interfaces (10 pF load)	-	-	350	mA
T _{amb}	Ambient temperature range	-	-40	-	85	°C
T _{j_oper}	Operative junction temp	-	-	-	125	°C
P _{diss}	Dissipated power	R _{ext} = 12 Ohm	-	-	1	W

3 Package information

In order to meet environmental requirements, ST offers these devices in different grades of **ECOPACK** packages, depending on their level of environmental compliance. ECOPACK specifications, grade definitions and product status are available at: www.st.com. ECOPACK is an ST trademark.

3.1 VFQFPN-64 (9x9x1.0mm) package information

Figure 2. VFQFPN-64 (9x9x1.0 mm) package outline



8511068_B_A02G

GAPGPS03460

Table 4. VFQFPN-64 (9x9x1.0 mm) package mechanical data

Ref.	Dimensions in mm		
	Min.	Typ.	Max.
Θ	-	-	14
A	-	-	1.0
A1	0.00	-	0.05
A2	0.55	-	0.80
A3	0.20 REF		
b ⁽¹⁾	0.18	0.25	0.30

Ref.	Dimensions in mm		
	Min.	Typ.	Max.
b1	-	0.15	-
D	9.00 BSC		
D1 ⁽²⁾	8.75 BSC		
D2	-	6.70	-
e	0.50 BSC		
E	9.00 BSC		
E1 ⁽²⁾	8.75 BSC		
E2	-	6.70	-
L	0.30	-	0.50
L1	0.15 REF		
L2	-	0.10	-
P	-	-	0.60
Tolerance of form and position			
aaa	0.15		
bbb	0.10		
ccc	0.10		
ddd	0.05		
eee	0.08		
fff	0.10		

1. Maximum allowable burr is 0.076 mm in all directions.

2. D1 and E1 are Maximum plastic body size dimensions including mold mismatch. Dimensions D1 and E1 do not include mold flash or protrusions. Allowable mold flash or protrusions is "0.25 mm (0.0098 inch)" per side.

Note: The package is compliant to IPC/JEDEC J-STD-020D June 2007 standard Moisture/Reflow Sensitivity Classification for Nonhermetic Solid State Surface Mount Devices, MSL Level 3.

Revision history

Table 5. Document revision history

Date	Revision	Changes
16-Dec-2014	1	Initial release.
29-Nov-2016	2	Fully revised.
15-May-2017	3	Added 'RDS demodulation' on Section Features .
25-Jan-2018	4	Updated Section Description and Device summary table on cover page.
25-Nov-2019	5	Updated Figure 1. Block diagram .

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, please refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2019 STMicroelectronics – All rights reserved