

AN1002 APPLICATION NOTE

LNBP FOR SET TOP BOX APPLICATION

TYPICAL APPLICATION BASED ON Power SO-20 PACKAGE

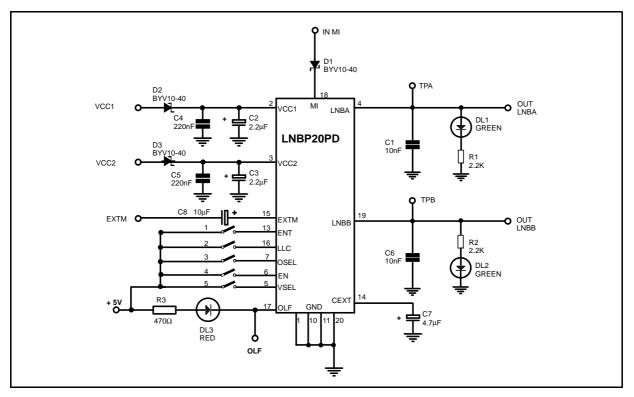
The purpose of this application note is to show how to use the LNBP in two basic applications. The first is based on the Power SO-20 package and circuit functionality is below describied. In the next pages the demoboard of the circuit is show. The same procedure has been applied on Multiwatt 20 package.

The PowerSO-20 electrical schematic is shown in figure 1. Two comb connectors (8 pins each) are used for the Input and Output Voltage and for all control signals (VSEL, EN,OSEL, LLC, ENT).

It is possible to force at high level all the control signals through a 5 pin dip-switch.

If the control signals come from outside the board, the dip-switchs must be in the OFF position. In the test points TPA and TPB must be connected to the oscillator probes to monitor the 22KHz signal.

Figure 1. LNBP20PD Schematic Circuit Description.



TYPICAL APPLICATION BASED ON Multiwatt 20 PACKAGE

The Multiwatt electrical schematic is shown in figure 2. In the board there are some connectors used for the input of the following signals: VCC1, VCC2, MI, +5V, and GND.

The load is connected between the Output connector LNBA-F (LNBB-F) and GND-F. Between the LNBA-S, LNBB-S and GND-S are connected two voltmeters used to monitor the output voltage.

AN1002 APPLICATION NOTE

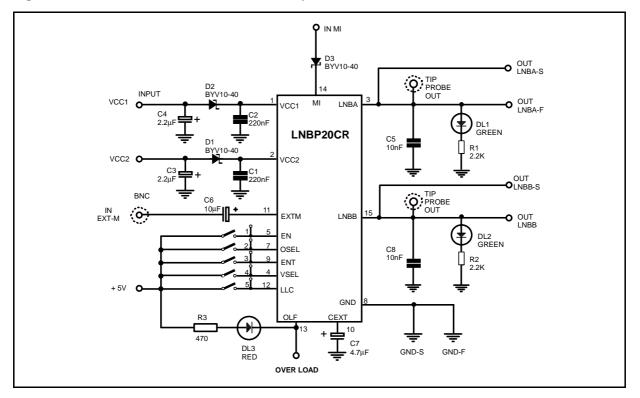


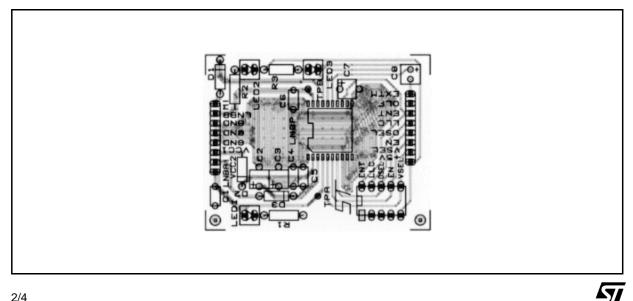
Figure 2. LNBP20CR Schematic Circuit Description.

Besides two plugs connected with the two Outputs permit to insert the oscilloscope probes to monitor the 22KHz tone.

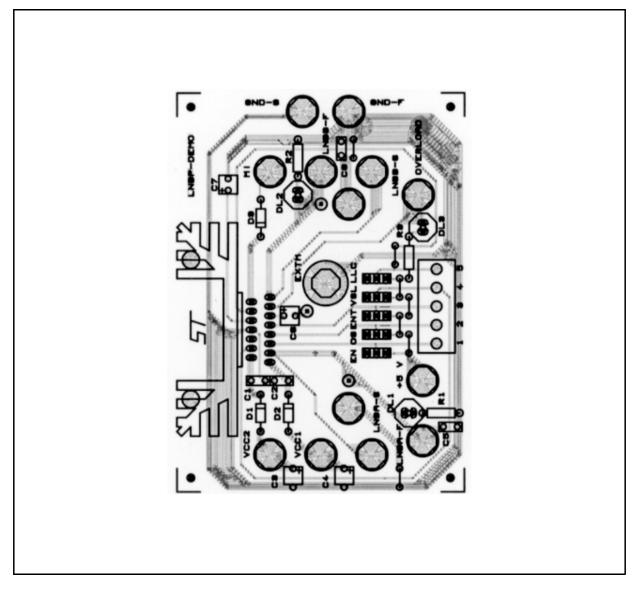
The EXT-M Input is connected to the relative BNC connector.

It is possible to force at high level the following inputs EN, OSEL, ENT, VSEL and LLC by five switchs. It is moreover possible to force such inputs even trough the five poles connectors. In this case all the switchs must be in OFF position.

Figure 3. Demoboard of LNBP20PD







AN1002 APPLICATION NOTE

Information furnished is believed to be accurate and reliable. However, SGS-THOMSON Microelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of SGS-THOMSON Microelectronics. Specification mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. SGS-THOMSON Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of SGS-THOMSON Microelectronics.

© 1998 SGS-THOMSON Microelectronics - Printed in Italy - All Rights Reserved

SGS-THOMSON Microelectronics GROUP OF COMPANIES

Australia - Brazil - Canada - China - France - Germany - Italy - Japan - Korea - Malaysia - Malta - Morocco - The Netherlands -Singapore - Spain - Sweden - Switzerland - Taiwan - Thailand - United Kingdom - U.S.A.

4/4

57