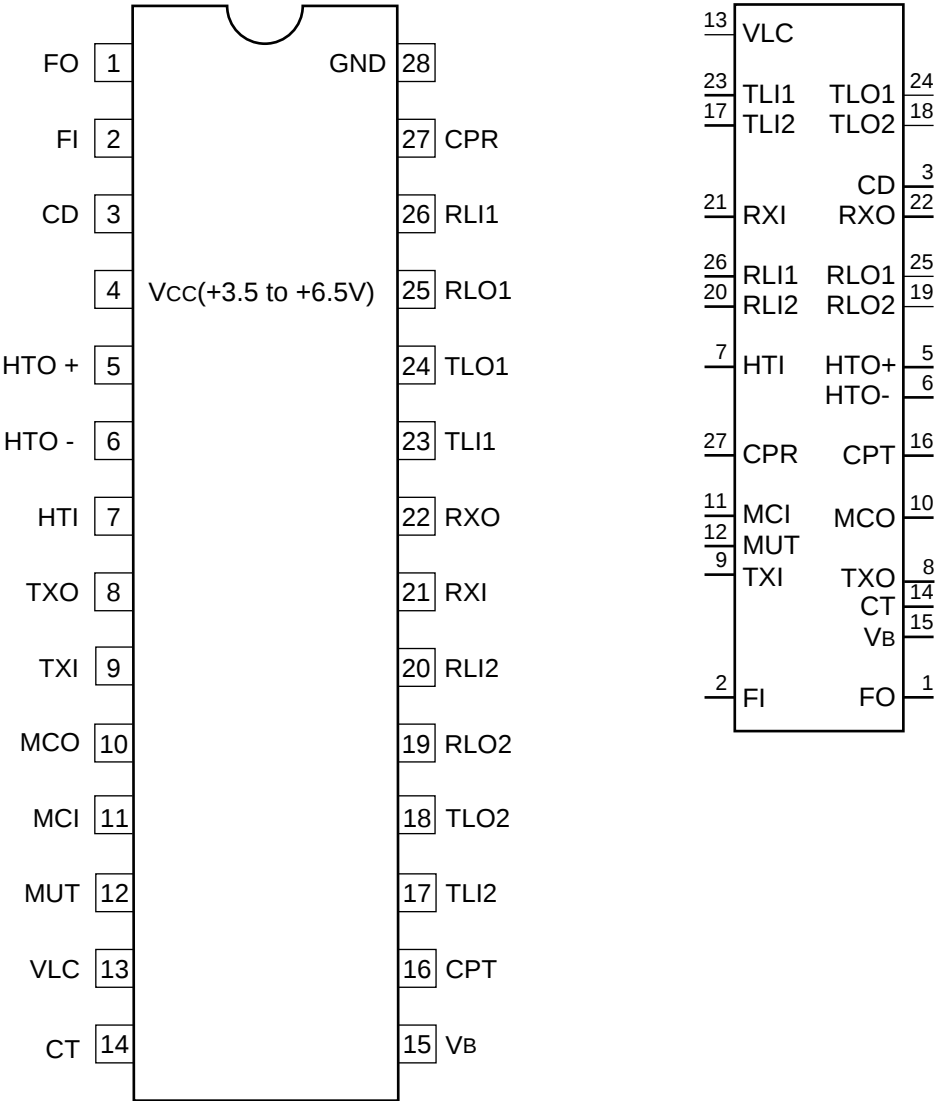

BI-POLAR SPEAKER-PHONE SYSTEM FOR TELEPHONE

-TOP VIEW-



INPUT

FI ; FILTER
HTI ; FIRST HYBRID AMP
MCI ; MICROPHONE AMP
MUT ; MUTING
RLI1 ; LINE RECEIVE LEVEL DETECT
RLI2 ; MICROPHONE / SPEAKER RECEIVE LEVEL DETECT
RXI ; RECEIVE ATTENUATOR AND DIAL TONE DETECT
TLI1 ; LINE TRANSMIT LEVEL DETECT
TLI2 ; MICROPHONE / SPEAKER TRANSMIT LEVEL DETECT
TXI ; TRANSMIT ATTENUATOR
VLC ; VOLUME CONTROL

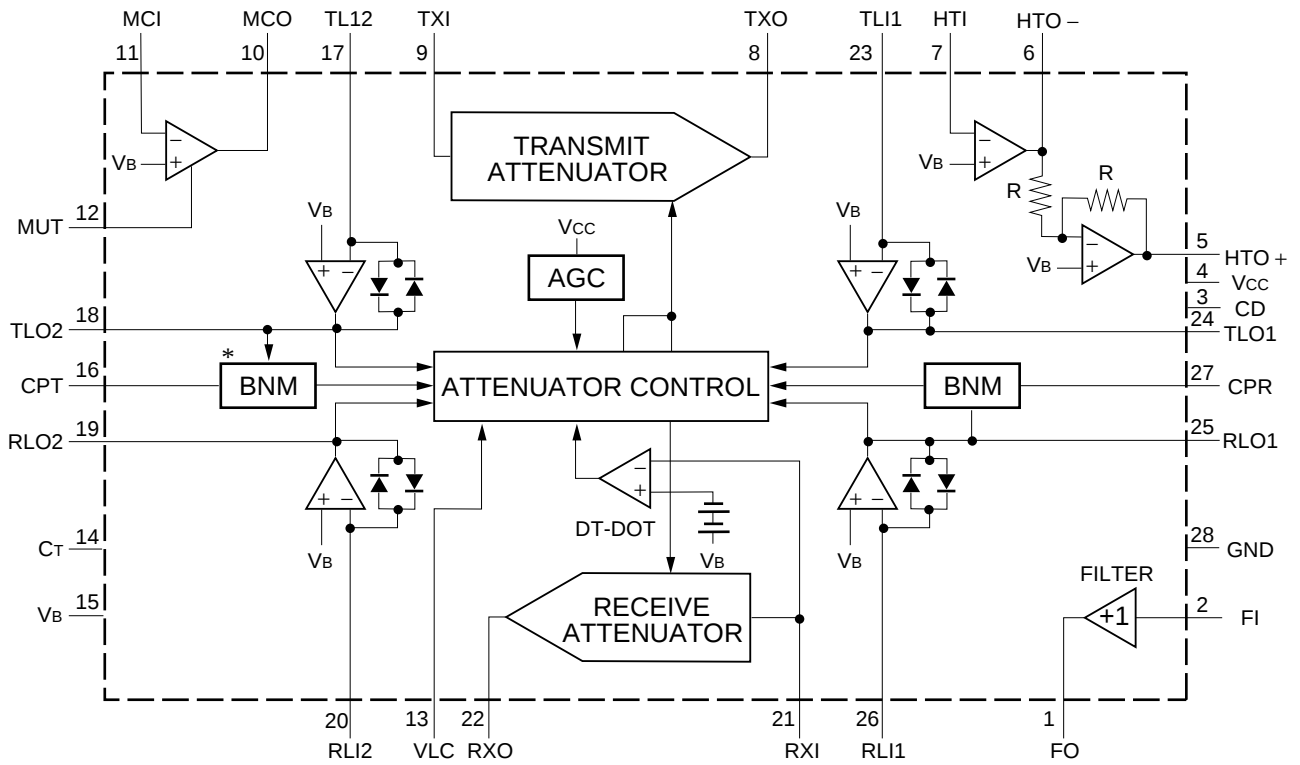
OUTPUT

CD ; CHIP DISABLE
FO ; FILTER
HTO+ ; SECOND HYBRID AMP
HTO- ; FIRST HYBRID AMP
MCO ; MICROPHONE AMP
RLO1 ; LINE RECEIVE LEVEL DETECT AND BNM
RLO2 ; MICROPHONE / SPEAKER RECEIVE LEVEL DETECT
RXO ; RECEIVE ATTENUATOR
TLO1 ; LINE TRANSMIT LEVEL DETECT
TLO2 ; MICROPHONE / SPEAKER TRANSMIT LEVEL DETECT AND BNM
TXO ; TRANSMIT ATTENUATOR
VB ; BIAS($\dot{=}V_{CC} / 2$)

OTHERS

CPR ; TIME CONSTANT FOR RECEIVE BNM
CPT ; TIME CONSTANT FOR TRANSMIT BNM
CT ; TIME CONSTANT FOR SWITCH RESPONSE

*BNM ; BACKGROUND NOISE MONITOR



* ; BACKGROUND NOISE MONITOR