

Table 2: Address Resolution

Device Part Number	Storage Time (seconds)	Msg. Resolution (msec)	Number of Message Addresses
ISD1016A	16	100	160
ISD1020A	20	125	160
ISD1110	10	125	80
ISD1112	12	150	80
ISD1210	10	125	80
ISD1212	12	150	80
ISD1416	16	100	160
ISD1420	20	125	160
ISD2532/60	32/60	100	320/600
ISD2540/75	40/75	125	320/600
ISD2548/90	48/90	150	320/600
ISD2564/120	64/120	200	320/600

NOTE: Storage time and resolution subject to clock tolerances.

Tables 2, 3, and 4 show example address boundaries for the ISD single-chip voice record/playback series products. They also show the address boundaries of unused space and the Operational Modes.

Message Addressing and Operational Mode Operations are mutually exclusive modes of the ISD devices. When Operational Mode is used, the MSP is always initialized to 0 (Unless an overriding Operational Mode is selected. See "Operational Modes" on under Application Information).

The ISD devices may be thought of as analog tape recorders with the capability of positioning the record/playback head anywhere on the tape at the address resolution given for each device. In the rest of this explanation on addressing, the ISD1016A will be used as the example. For a full list of all the ISD device address locations with time conversions for each device, see "Address Segment Resolution" under Application Information.

EXAMPLE OF RECORD AND PLAYBACK AT AN ADDRESS BOUNDARY

For this example, we are going to record a message starting at the 10 second boundary in an ISD1016A. Start by taking the PD pin to a LOW state and delaying T_{PUD} (see data sheet for the timing of the various ISD devices). An address of 100 ($100 \times .1 = 10$ seconds) should be applied to the address pins. Converting 100 to binary we get the address of 01100100. Next take the P/R pin LOW. To begin record, take \overline{CE} LOW and hold it in that state for the duration of the record time. When \overline{CE} is taken back HIGH, the recording will end and an EOM bit is set in the EOM memory.