



# MCS™ CUSTOM ROM ORDER FORM

# 8308 ROM

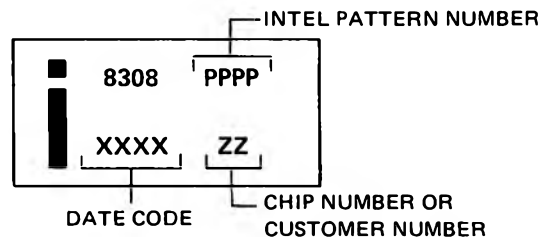
CUSTOMER _____	
P.O. NUMBER _____	
DATE _____	
For Intel use only	
S# _____	PPPP _____
STD _____	ZZ _____
_____	DD _____
APP _____	DATE _____

All custom 8308 ROM orders must be submitted on this form. Programming information should be sent in the form of computer punched cards or punched paper tape per the formats designated on this order form. Additional forms are available from Intel.

## MARKING

The marking as shown at the right must contain the Intel® logo, the product type (P8308), the 4-digit Intel pattern number (PPPP), a date code (XXXX), and the 2-digit chip number (DD). An optional customer identification number may be substituted for the chip number (ZZ). Optional Customer Number (maximum 9 characters or spaces).

CUSTOMER NUMBER \_\_\_\_\_



## MASK OPTION SPECIFICATIONS

### A. CHIP NUMBER (CHIP SELECT OPTION)

Must be specified 0 or 1.

The chip number will be coded in terms of positive logic where a logic "1" is high level input.

#### Chip Select Truth Table

Chip Number	CS1	CS2	Selected
0	0	0	Yes
1	0	1	Yes
0	1	0	No
1	1	1	No

Chip Number \_\_\_\_\_

### B. ROM Truth Table Format

Programming information should be sent in the form of computer punched cards or punched paper tape. In either case, a printout of the truth table should be accompanied with the order.

The following general format is applicable to the programming information sent to Intel:

- Data fields should be ordered beginning with the least significant address (0000) and ending with the most significant address (1023).
- A data field should start with the most significant bit and end with the least significant bit.

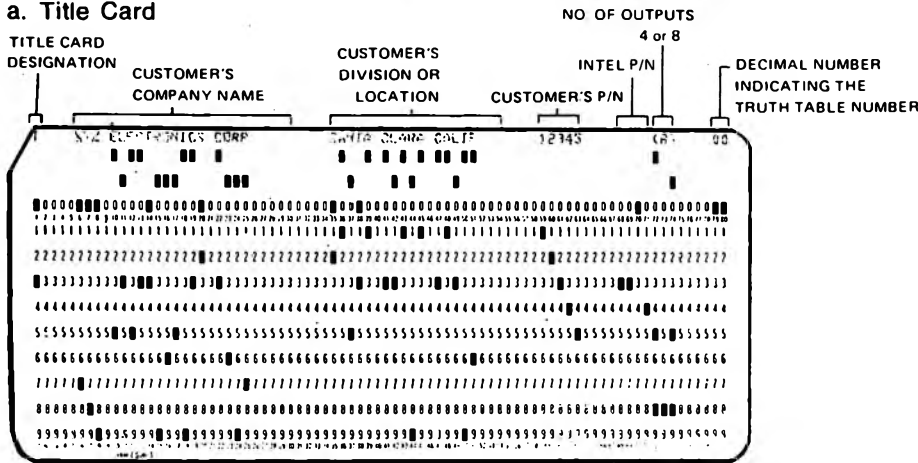
- The data field should consist of P's and N's. A P is to indicate a high level output (most positive) and an N a low level output (most negative). In terms of positive logic, a P is defined as a logic "1" and an N is defined as a logic "0". If the programming information is sent on a punched paper tape, then a start character, B, and an end character, F, must be used in the data field. See paragraph 2.

#### 1. Punched Card Format

An 80-column Hollerith card (preferably interpreted) punched by an IBM 026 or 029 keypunch should be submitted. The first card will be a title card; the format is as follows:

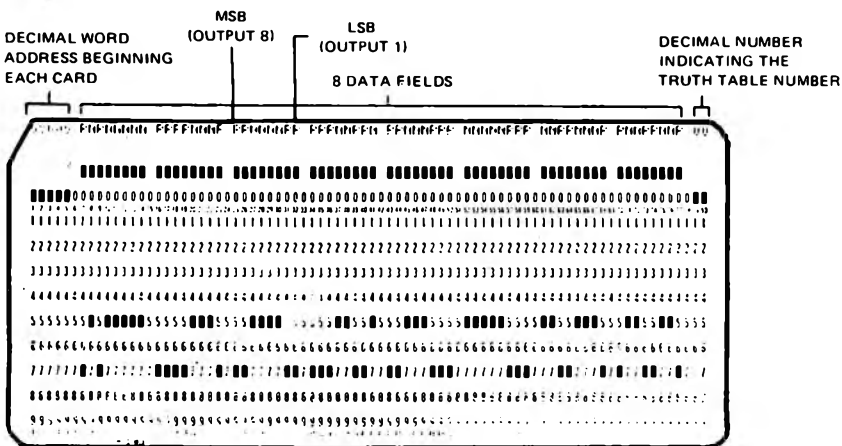
# MCS™ CUSTOM ROM ORDER FORM 8308

## a. Title Card



Column	Data
1	Punch a T
2-5	Blank
6-30	Customer Company Name
31-34	Blank
35-54	Customer's Company Division or location
55-57	Blank
58-66	Customer Part Number
67	Blank
68-75	Punch the Intel 4-digit basic part number and in ( ) the number of output bits, e.g., 8308(8).
76-78	Blank
79-80	Punch a 2-digit decimal number to identify the truth table number (mask programmed chip select number).

b. For a 1024 word X 8-bit organization only, cards 2 and the following cards should be punched as shown.



Column	Data
1-5	Punch the 5-digit decimal equivalent of the binary coded location which begins each card. The address is right justified, i.e., 00000, 00008, 00016, etc.
6	Blank
7-14	Data Field
15	Blank
16-23	Data Field
33	Blank
34-41	Data Field
42	Blank
43-50	Data Field
51	Blank
52-59	Data Field
60	Blank
61-68	Data Field
69	Blank
70-77	Data Field
78	Blank
79-80	Punch same 2-digit decimal number as in title card.

## 2. Paper Tape Format

1" wide paper tape using 7- or 8-bit ASCII code, such as a model 33 ASR teletype produces, or the 11/16" wide paper tape using a 5-bit Baudot code, such as a Telex produces.

The format requirements are as follows:

- a. All word fields are to be punched in consecutive order, starting with word field 0 (all addresses low). There must be exactly 1024 word fields for the 1024 X 8 ROM organization.
- b. Each word field must begin with the start character B and end with the stop character F. There must be exactly 8 data characters between the B and F.

NO OTHER CHARACTERS, SUCH AS RUBOUTS, ARE ALLOWED ANYWHERE IN A WORD FIELD. If in preparing a tape an error is made, the entire word field, including the B and F, must be rubbed out. Within the word field, a P results in a high level output and an N results in a low level output.

- c. Preceding the first word field and following the last word field, there must be a leader/trailer length of at least 25 characters. This should consist of rubout or null punches (letter key for Telex tapes).
- d. Between word fields, comments not containing B's or F's may be inserted. Carriage return and line feed characters should be inserted as a "comment"

just before each word field (or at least between every four word fields). When these carriage returns, etc., are inserted, the tape may be easily listed on the teletype for purposes of error checking. The customer may also find it helpful to insert the word number (as a comment) at least every four word fields.

e. Included in the tape before the leader should be the customer's complete Telex or TWX number and, if more than one pattern is being transmitted, the ROM pattern number.

f. MSB and LSB are the most and least significant bit of the device outputs. Refer to the data sheet for the pin numbers.

