

OPTIONS NODECK,LIST,XREF,NOREL,OBJ(P)

THE LIST OF OPTIONS USED DURING THIS ASSEMBLY IS-- NODECK,LIST,XREF,NOREL,OBJ

EXTERNAL SYMBOL LIST

SYMBOL TYPE

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#KRUNI MODULE

ERR LOC OBJECT CODE

ADDR STMT SOURCE STATEMENT

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0000

1 #KRUNI START 0
2 PRINT ON,NODATA
3 * @SYS EXP-N
212+ PRINT ON
213 * @HDW EXP-N
397+ PRINT ON
398 * @FXD EXP-N
802+ PRINT ON
803 * @CAN EXP-N
906+ PRINT ON
907 * @DIR EXP-N
1027+ PRINT ON
1028 * @WKA EXP-N
1098+ PRINT ON
1099 * @SPF EXP-N
1563+ PRINT ON
1564 * @ERM EXP-N
2186+ PRINT ON

1F00 2187 B\$PTBF EQU X'1F00'

#KRUNI - KEYWORD COMMAND RUN

ERR LOC OBJECT CODE ADDR STMT SOURCE STATEMENT VER 15, MOD 00 03/07/20 PAGE 3

```
2189 *      HDR   #KRUNI,0
2190 *****
2191 * PROGRAM HEADER FOR DISK LOAD
2192 *****
2193 *#$KRUN EQU   X'02CC'          DISK ADDR OF #KRUNI
2194 *#$KRU EQU   X'0C00'          CORE LOAD ADDRESS OF #KRUNI
2195 *#$@KRU EQU   003            SECTOR CNT OF #KRUNI
0C00 2196          ORG   #$$$KRU   CORE LOAD ADDRESS
0C00 7BD2D9E4D5C9 0C05 2197 $$$$$$ EQU   * FIRST LOCATION IN PROGRAM
0C06 17          0C06 2198          DC   CL6 '#KRUNI' PROGRAM NAME
0C07 2200 #KRUN EQU   *          PROGRAM NUMBER OF IKRUNI
2201 *** END OF EXPANSION ***
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#KRUNI - KEYWORD COMMAND RUN

ERR LOC	OBJECT CODE	ADDR	STMT	SOURCE STATEMENT	VER 15, MOD 00	03/07/20	PAGE	4
		2203		*****				*
		2204	*	5703-XM1 COPYRIGHT IBM CORP. 1970				*
		2205	*	REFER TO INSTRUCTIONS ON COPYRIGHT NOTICE. 120-2083				*
		2206	*					*
		2207		*****				*
		2208	*	STATUS				*
		2209	*	VERSION 1 MODIFICATION 0				*
		2210	*					*
		2211	*	FUNCTION				*
		2212	*	* THIS PROGRAM IS CALLED BY THE COMMAND ANALYZER WHEN A RUN OR				*
		2213	*	STEP OR TRACE COMMAND IS ISSUED. FOR THE RUN OR STEP COMMAND,				*
		2214	*	IT CHECKS THE SYNTAX OF THE COMMAND KEYWORD AND SETS THE PRIMARY				*
		2215	*	EXECUTION INDICATOR, \$XIND1, ACCORDINGLY. IF NO PARAMETER IS				*
		2216	*	SPECIFIED. THE COMPILER WILL BE LOADED INTO CORE AND EXECUTED.				*
		2217	*	IF A PARAMETER IS SPECIFIED. IT IS ASSUMED TO BE A FILE				*
		2218	*	SPECIFICATION. LINKAGE TO THE COMPILER IS SET UP, AND KEDITN IS				*
		2219	*	LOADED INTO CORE. IF KEDITN FINDS NO ERRORS, IT WILL LOAD THE				*
		2220	*	SPECIFIED PROGRAM FILE INTO THE WORK FILE AND THEN LOAD AND				*
		2221	*	EXECUTE THE COMPILER.				*
		2222	*	* FOR THE TRACE COMMAND. IT WILL SYNTAX CHECK THE PARAMETERS OF				*
		2223	*	THE COMMAND AND SET UP A MASK FOR THE PRIMARY EXECUTION				*
		2224	*	INDICATOR. IF A LIST OF BASIC-IDENTIFIERS IS PRESENT, IT WILL				*
		2225	*	BE WRITTEN TO VIRTUAL MEMORY FOR LATER USE BY THE COMPILER.				*
		2226	*	IF NO ERRORS WERE FOUND, IT WILL EXIT TO CHECK THE STATUS OF				*
		2227	*	THE WORK FILE AND LOAD THE COMPILER.				*
		2228	*					*
		2229	*	ENTRY POINTS				*
		2230	*	* THE ENTRY IS KRUNIT. THE BASE AND INDEX REGISTERS ARE NOT SAVED.				*
		2231	*	BOTH REGISTERS ARE USED.				*
		2232	*					*
		2233	*	INPUT				*
		2234	*	NONE				*
		2235	*					*
		2236	*	OUTPUT				*
		2237	*	NONE				*
		2238	*					*
		2239	*	EXTERNAL REFERENCES				*
		2240	*	\$XIND2 - ADDRESS OF EXECUTION INDRS				*
		2241	*	\$XRSV - ADDRESS OF 2 BYTE SAVE AREA				*
		2242	*	SCANIT - ADDRESS OF ENTRY POINT TO SCAN ROUTINE				*
		2243	*	\$WFNME - ADDRESS OF WORK FILE NAME				*
		2244	*	\$CAERR - ADDRESS OF ERROR CODE FOR ERROR PGM				*
		2245	*	\$INDR1 - ADDRESS OF WORK FILE STATUS INDRS				*
		2246	*	\$CAERK - ADDRESS OF ERROR CODE FOR ERROR PGM				*
		2247	*	\$XIND3 - ADDRESS OF EXECUTION INDRS				*
		2248	*	\$XIND1 - ADDRESS OF PRIMARY EXECUTION INDRS				*
		2249	*	\$RLOAD - ADDRESS OF ENTRY TO BLAST LOAD PGM NOT RESIDING ON CYL4				*
		2250	*	\$XIND - ADDRESS OF EXECUTION INDR USED BY KEDITN				*
		2251	*	SDISK - ADDRESS OF ENTRY TO DISK IOCR				*
		2252	*	\$ILEN - ADDRESS OF INPUT LINE BUFFER HEADER				*
		2253	*					*
		2254	*	EXITS, NORMAL				*
		2255	*	NORMAL EXIT IS MADE TO \$RLOAD TO LOAD AND EXECUTE COMPILER OR				*
		2256	*	KEDITN.				*
		2257	*					*
		2258	*	EXITS, ERROR				*

#KRUNI - KEYWORD COMMAND RUN

ERR LOC	OBJECT CODE	ADDR	STMT	SOURCE STATEMENT	VER 15, MOD 00 03/07/20 PAGE 5
		2259	*	SAME AS FOR NORMAL EXITS, BUT ABNORMAL EXIT.	*
		2260	*		*
		2261	*	*TABLES/WORK AREA	*
		2262	*	* * THE CONSTANTS AND DPL LISTS TO LOAD COMPILER, KEDITN AND WRITE	*
		2263	*	TRACE LIST TO VIRTUAL MEMORY ARE AT THE END OF THE EXECUTABLE	*
		2264	*	CODE.	*
		2265	*		*
		2266	*	*ATTRIBUTES	*
		2267	*	RELOCATABLE	*
		2268	*		*
		2269	*	*CHARACTER CODE DEPENDENCY	*
		2270	*	THE OPERATION OF THIS MODULE DOES NOT DEPEND UPON A PARTICULAR	*
		2271	*	INTERNAL REPRESENTATION OF THE EXTERNAL CHARACTER SET.	*
		2272	*		*
		2273	*	*NOTES	*
		2274	*	ERROR PROCEDURES	*
		2275	*	EXIT IS MADE TO THE ERROR PGM FOR THE FOLLOWING CONDITIONS:	*
		2276	*	* INVALID PARAMETER	*
		2277	*	* NO WORK FILE DEFINED	*
		2278	*	* EMPTY WORK FILE	*
		2279	*	* DATA WORK FILE IN WORK AREA	*
		2280	*	* INVALID SECONDARY PARAMETER	*
		2281	*	* INVALID BASIC IDENTIFIER	*
		2282	*	* REPETITION OF KEYWORD PARAMETERS	*
		2283	*	* INVALID SUBSCRIPTS	*
		2284	*		*
		2285	*	REGISTER USAGE	*
		2286	*	INDEX REGISTER 1 (@BR) AND REGISTER 2 (@XR) ARE USED.	*
		2287	*		*
		2288	*	SAVED/RESTORED AREAS	*
		2289	*	NONE	*
		2290	*		*
		2291	*	MODIFICATION CONSIDERATIONS	*
		2292	*	NONE	*
		2293	*		*
		2294	*	REQUIRED MODULES	*
		2295	*	@SYSEQ - COMMON SYSTEM EQUATES	*
		2296	*	@HDWEQ - SYSTEM HARDWARE EQUATES	*
		2297	*	@FXDEQ - SYSTEM NUCLEUS ADDRESSES AND INDICATOR VALUE EQUATES	*
		2298	*	@CANEQ - SYSTEM LOCATION EQUATES	*
		2299	*	@DIREQ - FILE LIBRARY EQUATES	*
		2300	*	SCANIT - BLANK SCAN ROUTINE	*
		2301	*		*
		2302	*	OTHER	*
		2303	*	NONE	*
		2304	*	*****	*
		0C07	2306	KRUNIT EQU *	
0C07	3B 10 03D1		2307	SBF \$XIND2,\$ABORT	SET OFF 'ABOPT' BIT
0C0B	C2 01 0E67		2308	KRU100 LA KRUVM, @BR	POINT BR TO ORIGIN
		0E67	2309	USING KRUVM, @BR	BASE REGISTER DISPLACEMENT
0C0F	3C 00 06FF		2310	MVI KRUIDR, @ZERO	INIT TEMP PRIMARY EXEC INDR
			2311	*	
			2312	*	DETERMINE IF RUN, STEP OR TRACE COMMAND
			2313	*	
0C13	35 02 03C7		2314	KRU110 L \$XRSV, @XR	XR POINTS TO CHARACTER

#KRUNI - KEYWORD COMMAND RUN

ERR	LOC	OBJECT	CODE	ADDR	STMT	SOURCE	STATEMENT	VER 15, MOD 00	03/07/20	PAGE	6
	0C17	76	02 19		2315	A	KRUCSO(,@BR),@XR				DECREMENT XR BY 1
	0C1A	9D	02 00 1C		2316	CLC	@ZERO(KRULG1-KRULGO,@XR),KRURUN(,@BR) COMMAND = 'RUN' ?				
	0C1E	F2	01 07		2317	JNE	KRU120				JUMP IF NOT RUN
	0C21	3A	01 06FF		2318	SBN	KRUIDR,\$RUNIT				SET ON RUN INDICATOR
	0C25	F2	87 0B		2319	J	KRU130				JUMP TO CHECK SECONDARY
					2320	*					* PARAMETER LIST
	0C28	9D	03 00 20		2321	KRU120 CLC	@ZERO(KRULG2-KRULG1,@XR),KRUSTP(,@BR) COMMAND = 'STEP' ?				
	0C2C	F2	01 7A		2322	JNE	KRU180				JUMP AND PROCESS TRACE COMMAND
	0C2F	3A	02 06FF		2323	SBN	KRUIDR,\$STEPT				SET ON STEP INDICATOR
					2324	*					
					2325	*	ANALYZE SECONDARY PARAMETERS AND DELIMITERS				
					2326	*					
	0C33	E2	02 01		2327	KRU130 LA	KRUONE(,@XR),@XR				INCREMENT XR POINTER BY 1
	0C36	C0	87 0E21		2328	B	KRU500				BRANCH TO CHECK PARAMETERS
	0C3A	F2	01 0A		2329	JNE	KRU145				JUMP IF EOS
	0C3D	C0	87 0E9C		2330	KRU140 B	SCANIT				SCAN TO NON-BLANK
	0C41	BD	1E 00		2331	CLI	@ZERO(,@XR),@EOS				CHARACTER = EOS ?
	0C44	F2	01 58		2332	JNE	KRU170				JUMP IF NOT EOS
					2333	*					
					2334	*	VERIFY WORK FILE STATUS				
					2335	*					
	0C47	D2	02 00		2336	KRU145 LA	@ZERO(,@BR),@XR				POINT XR OUT OF INPUT BUFFER
	0C4A	38	40 0443		2337	TBN	\$WFNME,\$WFDEF				TEST IF WORK FILE DEFINED
	0C4E	F2	10 07		2338	JT	KRU146				JUMP IF DEFINED
	0C51	3C	2A 03CD		2339	MVI	\$CAERR,@@E220				MOVE ERROR CODE
	0C55	F2	87 27		2340	J	KRU155				JUMP TO ERROR PROGRAM
	0C58	39	04 03D4		2341	KRU146 TBF	\$INDR1,\$WSIND				CHECK IF \$WIND ON
	0C5C	F2	10 07		2342	JT	KRU148				JUMP IF WORK FILE DEFINED
	0C5F	3C	2F 03CD		2343	MVI	\$CAERR,@@E226				MOVE INVALID CODE TO ERROR
					2344	*					* PROGRAM
	0C63	F2	87 19		2345	J	KRU155				JUMP TO ERROR PROGRAM
	0C66	38	80 03D4		2346	KRU148 TBN	\$INDR1,\$BASIC				BASIC PROGRAM ?
	0C6A	F2	10 07		2347	JT	KRU150				YES
	0C6D	3C	30 03CD		2348	MVI	\$CAERR,@@E227				MOVE ERROR CODE
	0C71	F2	87 0B		2349	J	KRU155				GO TO ERROR PRGM
	0C74	39	20 03D4		2350	KRU150 TBF	\$INDR1,\$PGMDT				TEST IF \$PGMDT OFF
	0C78	F2	10 08		2351	JT	KRU160				JUMP IF \$FLTYP OFF
	0C7B	3C	30 03CD		2352	MVI	\$CAERR,@@E227				MOVE ERROR CODE
	0C7F	C0	87 0469		2353	KRU155 B	\$CAERK				BRANCH TO ERROR PROGRAM
	0C83	3B	80 06FF		2354	KRU160 SBF	KRUIDR,KRUFLG				SET '\$' INDR OFF
	0C87	0C	00 03D8 03D0		2355	MVC	\$XIND3(KRUONE),\$XIND1				SAVE PRIMARY EXECUTION INDR
	0C8D	0C	00 03D0 06FF		2356	MVC	\$XIND1(KRUONE),KRUIDR				MOVE TEMP PRIMARY EXEC INDR
					2357	*					
					2358	*	LOAD COMPILER AND EXECUTE PROGRAM				
					2359	*					
					2360	*	DISK KRUPIM				PRIME COMPILER
	0C93	C0	87 0025		2361	B	\$DISKN				PERFORM PHYSICAL DISK OP
	0C97	0E79		0C98	2362	DC	AL2(KRUPIM)				DPL ADDRESS
					2363	***	END OF EXPANSION ***				
	0C99	C0	87 051E		2364	B	\$RLOAD				LOAD COMPILER AND EXECUTE
	0C9D	0E6D		0C9E	2365	DC	AL2(KRUCPL)				DPL OF PARAMETER LIST
					2366	*					
					2367	*	LOAD KEDIIN AND EXECUTE PROGRAM				
					2368	*					
	0C9F	3A	80 06FF		2369	KRU170 SBN	\$\$XIND,\$EDRUN				SIT \$EDRUN ON
	0CA3	C0	87 051E		2370	B	\$RLOAD				LOAD KEDITN AND EXECUTE

#KRUNI - KEYWORD COMMAND RUN

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0CA7	0E73		0CA8	2371	DC	AL2(KRUEDT)	DPL OF PARAMETER LIST
				2372	*		
				2373	*	PROCESS 'TRACE' COMMAND	
				2374	*		
0CA9	E2 02 01			2375	KRU180 LA	KRUONE(,@XR),@XR	INCREMENT XR POINTER BY 1
0CAC	3A 04 06FF			2376	SBN	KRUIDR,\$TRACE	SET TRACE INDR ON
				2377	*		
				2378	*	ANALYZE SECONDARY PARAMETERS AND DELIMITERS	
				2379	*		
0CB0	C0 87 0E21			2380	B	KRU500	CHECK SECONDARY PARAMETERS
0CB4	F2 81 10			2381	JE	KRU190	JUMP IF BLANK CHARACTER
0CB7	3A 10 06FF			2382	SBN	KRUIDR,\$TRALL	SET ON ALL INDR
0CBB	C0 87 0C47			2383	B	KRU145	BRANCH TO LOAD COMPILER
0CBF	3C 11 03CD			2384	KRU185 MVI	\$CAERR,@E131	MOVE ERROR CODE
0CC3	C0 87 0469			2385	B	\$CAERK	BRANCH TO ERROR PROGRAM
0CC7	C0 87 0E9C			2386	KRU190 B	SCANIT	SCAN TO NON-BLANK
0CCB	C0 87 0DFE			2387	KRU195 B	KRU400	CHARACTER AN ALPHA ?
0CCF	F2 84 07			2388	JH	KRU196	JUMP IF NUMERIC
0CD2	34 02 0D39			2389	ST	KRU265+@OP1,@XR	SAVE XR FOR ERROR
0CD6	F2 87 08			2390	J	KRU197	
0CD9	3C 1B 03CD			2391	KRU196 MVI	\$CAERR,@E150	MOVE ERROR CODE
0CDD	C0 87 0469			2392	B	\$CAERK	BRANCH TO ERROR PGM

#KRUNI - KEYWORD COMMAND RUN

ERR	LOC	OBJECT	CODE	ADDR	STMT	SOURCE	STATEMENT	VER	MOD	00	03/07/20	PAGE	8
					2394	*							
					2395	*	CHECK FOR 'ALL' AND 'FLOW' PARAMETERS						
					2396	*							
0CE1	9D	02	02	2E	2397	KRU197	CLC KRULG5-KRULG4-1(KRULG5-KRULG4,@XR),KRUALL(,@BR)						
					2398	*							
0CE5	F2	81	19		2399		JE KRU230 JUMP IF 'ALL'						
0CE8	9D	03	03	32	2400		CLC KRULG6-KRULG5-1(KRULG6-KRULG5,@XR),KRUFLW(,@BR)						
					2401	*							
0CEC	F2	01	64		2402		JNE KRU290 JUMP IF NOT 'FLOW'						
0CEF	39	28	06FF		2403	KRU200	TBF KRUIDR,\$STRVAR+\$TFLOW \$STRVAR OR \$TFLOW SET ?						
0CF3	C0	90	0D08		2404		BF KRU235 BRANCH IF EITHER SET						
0CF7	3A	08	06FF		2405	KRU210	SBN KRUIDR,\$TFLOW SET \$TFLOW ON						
0CFB	E2	02	04		2406	KRU220	LA KRULG6-KRULG5(,@XR),@XR INCREMENT XR BY 'FLOW'						
0CFE	F2	87	16		2407		J KRU250 JUMP TO SCAN NON-BLANK						
0D01	39	30	06FF		2408	KRU230	TBF KRUIDR,\$STRVAR+\$TRALL \$STRVAR OR \$TRALL SET ?						
0D05	F2	10	08		2409		JT KRU240 BRANCH IF EITHER SET						
0D08	3C	13	03CD		2410	KRU235	MVI \$CAERR,@E134 MOVE ERROR CODE						
0D0C	C0	87	0469		2411		B \$CAERK BRANCH TO ERROR PGM						
0D10	3A	10	06FF		2412	KRU240	SBN KRUIDR,\$TRALL SET STRALL ON						
0D14	E2	02	03		2413		LA KRULG5-KRULG4(,@XR),@XR INCREMENT XR BY 'ALL'						
0D17	3C	01	0EB9		2414	KRU250	MVI SCAMMA,SCACOM SET TO IGNORE ONE COMMA						
0D1B	C0	87	0E9C		2415		B SCANIT SCAN TO NON-BLANK						
0D1F	F2	81	07		2416		JZ KRU260 JUMP IF POINTER NOT MOVED						
0D22	BD	1E	00		2417		CLI @ZERO(,@XR),@EOS CHARACTER = EOS ?						
0D25	C0	01	0CCB		2418		BNE KRU195 JUMP IF NOT E05 AND PROCESS						
					2419	*							
0D29	BD	1E	00		2420	KRU260	CLI @ZERO(,@XR),@EOS CHARACTER = EOS ?						
0D2C	F2	81	13		2421		JE KRU270 JUMP IF OS						
0D2F	38	20	06FF		2422		TBN KRUIDR,\$STRVAR TRACE LIST INDR ON ?						
0D33	F2	10	08		2423		JT KRU267 JUMP IF TRACE VARIABLES						
0D36	C2	02	0000		2424	KRU265	LA *-*,@XR RESTORE BR						
0D3A	C0	87	0CBF		2425		B KRU185 BRANCH TO ERROR PGM						
0D3E	C0	87	0CD9		2426	KRU267	B KRU196 BRANCH TO ERROR PGM						

#KRUNI - KEYWORD COMMAND RUN

ERR	LOC	OBJECT	CODE	ADDR	STMT	SOURCE	STATEMENT	VER	MOD	DATE	PAGE	
					2428	*						
					2429	*	ANALYZE 'TRACE' VARIABLE LIST					
					2430	*						
0D42	38	20	06FF		2431	KRU270	TBN KRUIDR,\$STRVAR \$STRVAR SET ON ?					
0D46	F2	90	06		2432		JF KRU280 JUMP IF \$STRVAR OFF					
					2433	*						
					2434	*	WRITE 'TRACE' VARIABLE LIST TO VIRTUAL MEMORY					
					2435	*						
0D49	C0	87	0025		2436		B \$DISKN WRITE VARIABLE LIST TO DISK					
0D4D	0E67			0D4E	2437		DC AL2(KRUVMM) DPL OF PARAMETER LIST					
0D4F	C0	87	0C47		2438	KRU280	B KRU145 JUMP & EXEC PROGRAM IN WORK FILE					
					2439	*						
					2440	*	ANALYZE 'TRACE' PARAMETERS					
					2441	*						
0D53	38	20	06FF		2442	KRU290	TBN KRUIDR,\$STRVAR \$STRVAR SET ON ?					
0D57	F2	10	0E		2443		JT KRU300 JUMP IF \$STRVAR ON					
0D5A	34	02	0601		2444		ST \$\$ILEN,@XR STORE XR IN INPUT HEADER					
0D5E	0F	01	0601	0E6C	2445		SLC \$\$ILEN(@CADDR),KRUSRT CALCULATE RELATIVE DISP					
0D64	3A	20	06FF		2446		SBN KRUIDR,\$STRVAR SET \$STRVAR ON					
0D68	E2	02	01		2447	KRU300	LA KRUONE(,@XR),@XR INCREMENT XR BY 1					
0D6B	C0	87	0DFE		2448		B KRU400 CHARACTER NUMERIC ?					
0D6F	F2	04	06		2449		JNH KRU310 JUMP IF NON-NUMERIC					
0D72	E2	02	01		2450		LA KRUONE(,@XR),@XR INCREMENT XR BY 1					
0D75	F2	87	42		2451		J KRU335 BRANCH TO SCAN NON-BLANK					
0D78	BD	5B	00		2452	KRU310	CLI @ZERO(,@XR),KRUDOL CHARACTER = '\$' ?					
0D7B	F2	81	0C		2453		JE KRU315 JUMP IF \$					
0D7E	BD	7C	00		2454		CLI @ZERO(,@XR),KRUATT '@' ?					
0D81	F2	81	06		2455		JE KRU315 JUMP IF YES					
0D84	BD	7B	00		2456		CLI @ZERO(,@XR),KRUPND '#' ?					
0D87	F2	01	07		2457		JNE KRU320 JUMP IF NOT '('					
0D8A	E2	02	01		2458	KRU315	LA KRUONE(,@XR),@XR UPDATE OR BY 1					
0D8D	3A	80	06FF		2459		SBN KRUIDR,KRUF LG SET ON 'S' INDICATOR					
0D91	BD	4D	00		2460	KRU320	CLI @ZERO(,@XR),KRUBRC CHARACTER = '(' ?					
0D94	F2	01	1F		2461		JNE KRU330 JUMP IF NOT '('					
0D97	E2	02	01		2462		LA KRUONE(,@XR),@XR INCREMENT XR BY 1					
0D9A	C0	87	0DFE		2463		B KRU400 CHARACTER NUMERIC ?					
0D9E	F2	84	1D		2464		JH KRU337 JUMP IF NUMERIC					
0DA1	9D	01	01	34	2465		CLC KRULG7-KRULG6-1(KRULG7-KRULG6,@XR),KRUVAR(,@BR)					
					2466	*	* CHARACTERS = '*' ?					
0DA5	F2	81	08		2467		JE KRU323 JUMP IF '*'					
0DA8	3C	1C	03CD		2468	KRU322	MVI \$CAERR,@E151 MOVE ERROR CODE					
0DAC	C0	87	0469		2469		B \$CAERK BRANCH TO ERROR PGM					
0DB0	E2	02	01		2470	KRU323	LA KRUONE(,@XR),@XR INCREMENT XR BY 1					
0DB3	E2	02	01		2471	KRU325	LA KRUONE(,@XR),@XR INCREMENT XR BY 1					
0DB6	3B	80	06FF		2472	KRU330	SBF KRUIDR,KRUF LG TURN OFF '\$' INDICATOR					
0DBA	C0	87	0D17		2473	KRU335	B KRU250 BRANCH TO SCAN NON-BLANK					
0DBE	76	02	19		2474	KRU337	A KRUCSO(,@BR),@XR					
0DC1	E2	02	02		2475	KRU340	LA KRUTWO(,@XR),@XR INCREMENT XR BY 2					
0DC4	C0	87	0DFE		2476	KRU345	B KRU400 CHARACTER NUMERIC ?					
0DC8	F2	04	07		2477		JNH KRU350 JUMP IF NOT NUMERIC					
0DCB	E2	02	01		2478		LA KRUONE(,@XR),@XR INCREMENT XR BY 1					
0DCE	C0	87	0DC4		2479		B KRU345 RETURN TO CHECK IF NUMERIC					
0DD2	BD	5D	00		2480	KRU350	CLI @ZERO(,@XR),KRUKET CHARACTER = ')' ?					
0DD5	C0	81	0DB3		2481		BE KRU325 BRANCH IF YES					
0DD9	BD	68	00		2482		CLI @ZERO(,@XR),KRUCOM CHARACTER = ',' ?					
0DDC	C0	01	0DA8		2483		BNE KRU322 BRANCH IF NOT					

#KRUNI - KEYWORD COMMAND RUN

ERR	LOC	OBJECT	CODE	ADDR	STMT	SOURCE	STATEMENT	VER 15, MOD 00 03/07/20 PAGE 10
0DE0	38	80	06FF		2484	TBN	KRUIDR, KRUFLG	IS '\$' INDR SET ?
0DE4	C0	10	0DA8		2485	BT	KRU322	BRANCH TO TO ERROR PGM
0DE8	E2	02	01		2486	LA	KRUONE(, @XR), @XR	INCREMENT XR BY 1
0DEB	C0	87	0DFE		2487	B	KRU400	CHARACTER NUMERIC ?
0DEF	C0	04	0DA8		2488	BNH	KRU322	BRANCH IF NOT NUMERIC
0DF3	3A	80	06FF		2489	SBN	KRUIDR, KRUFLG	TURN ON '\$' INDR
0DF7	76	02	19		2490	A	KRUCSO(, @BR), @XR	DECREMENT XR BY 1
0DFA	C0	87	0DC1		2491	B	KRU340	BRANCH TO CHECK IF NUMERIC
					2492	*		
					2493	*	ROUTINE CHECKS CHARACTER REFERENCED BY	
					2494	*	XR TO DETERMINE IF ALPHA OR NUMERIC	
					2495	*	EXIT: PSR REGISTER INDICATES TYPE OF CHARACTER	
					2496	*	1. LOW - ALPHA	
					2497	*	2. HIGH - NUMERIC	
					2498	*	3. EQUAL - NON - ALPHA/NUMERIC	
					2499	*		
				0DFE	2500	KRU400	EQU *	
0DFE	34	08	0E20		2501	ST	KRU440+@OP1, @ARR	SAVE ARR FOR RETURN
0E02	BD	C1	00		2502	CLI	@ZERO(, @XR), KRUAL1	CHECK ALPHA LOWER BOUND
0E05	F2	82	12		2503	JL	KRU430	JUMP IF NON-ALPHA/NUMERIC
0E08	BD	EA	00		2504	CLI	@ZERO(, @XR), KRUAL2	CHECK ALPHA UPPER BOUND
0E0B	F2	82	0F		2505	JL	KRU440	JUMP IF ALPHA CHARACTER
0E0E	BD	F9	00		2506	KRU420	CLI @ZERO(, @XR), KRUNU2	CHECK NUMERIC UPPER BOUND
0E11	F2	84	06		2507	JH	KRU430	JUMP IF NON-ALPHA/NUMERIC
0E14	BD	EF	00		2508	CLI	@ZERO(, @XR), KRUNU1	CHECK NUMERIC LOWER BOUND
0E17	F2	84	03		2509	JH	KRU440	JUMP IF NUMERIC CHARACTER
0E1A	7D	5D	34		2510	KRU430	CLI KRUVAR(, @BR), KRUKET	FORCE PSR TO NON-ALPHA/NUMERIC
0E1D	C0	87	0000		2511	KRU440	B *-*	RETURN TO CALLER
					2513	*		
					2514	*	CHECK FOR '-LONG' OR '-SHORT' AND SET APPROPRIATE	
					2515	*	INDICATORS IF FOUND	
					2516	*	CHECK FOR BLANK AND EOS AS DELIMITERS	
					2517	*	EXIT: PSR REGISTER INDICATES	
					2518	*	DELIMITER FOUND	
					2519	*	1. EQUAL - BLANK DELIMITER	
					2520	*	2. NOT EQUAL - EOS DELIMITER	
					2521	*	NOTE: IF NEITHER DELIMITER IS FOUND A	
					2522	*	BRANCH IS MADE TO THE ERROR PROGRAM	
					2523	*		
				0E21	2524	KRU500	EQU *	
0E21	34	08	0E66		2525	ST	KRU550+@OP1, @ARR	SAVE ARR FOR RETURN
0E25	34	02	0E54		2526	ST	KRU533+@OP1, @XR	SAVE XR FOR EXIT
0E29	9D	04	04 25		2527	CLC	KRULG3-KRULG2-1(KRULG3-KRULG2, @XR), KRULNG(, @BR)	
					2528	*	* CHECK FOR '-LONG'	
0E2D	F2	01	07		2529	JNE	KRU510	JUMP IF NOT
0E30	3A	40	06FF		2530	SBN	KRUIDR, \$XPREC	SET \$XPREC ON
0E34	E2	02	05		2531	LA	KRULG3-KRULG2(, @XR), @XR	INCREMENT XR BY '-LONG'
0E37	9D	05	05 2B		2532	KRU510	CLC KRULG4-KRULG3-1(KRULG4-KRULG3, @XR), KRUSHT(, @BR)	
					2533	*	* CHECK FOR '-SHORT'	
0E3B	F2	01	03		2534	JNE	KRU530	JUMP IF NOT
0E3E	E2	02	06		2535	KRU520	LA KRULG4-KRULG3(, @XR), @XR	INCREMENT XR BY '-SHORT'
0E41	BD	40	00		2536	KRU530	CLI @ZERO(, @XR), @BLANK	DELIMITER A BLANK ?
0E44	F2	81	1C		2537	JE	KRU550	JUMP IF BLANK CHARACTER
0E47	C0	87	0E9C		2538	B	SCANIT	SCAN ACROSS BLANKS
0E4B	BD	1E	00		2539	CLI	@ZERO(, @XR), @EOS	DELIMITER = EOS

#KRUNI - KEYWORD COMMAND RUN

ERR	LOC	OBJECT	CODE	ADDR	STMT	SOURCE	STATEMENT	VER 15, MOD 00	03/07/20	PAGE 11
0E4E	F2	81	0F		2540	JE	KRU540			JUMP IF EUS
0E51	C2	02	0000		2541	KRU533	LA *-*,@XR			RESTORE XR
0E55	E2	02	01		2542		LA KRUONE(,@XR),@XR			BUMP XR BY 1
0E58	3C	1A	03CD		2543	KRU535	MVI \$CAERR,@E143			MOVE ERROR CODE
0E5C	C0	87	0469		2544	KRU536	B \$CAERK			BRANCH TO ERROR PROGRAM
0E60	BD	40	00		2545	KRU540	CLI @ZERO(,@XR),@BLANK			FORCE PSR NOT EQUAL
0E63	C0	87	0000		2546	KRU550	B *-*			RETURN TO CALLER
					2547	*				
					2548	*	PARAMETER LIST TO WRITE 'TRACE' VARIABLE LIST			
					2549	*	TO VIRTUAL MEMORY			
					2550	*				
0E67	02			0E67	2551	KRUVMM	DC AL1(@DPUT)			WRITE FUNCTION
0E68	07			0E68	2552		DC AL1(@DVBCY)			BASE CYL ADDRESS
0E69	B1			0E69	2553		DC XL1'B1'			TRACE RCF LIST PAGE DISP
0E6A	01			0E6A	2554		DC AL1(KRUONE)			SECTOR COUNT
0E6B	0600			0E6C	2555	KRUSRT	DC AL2(\$\$ILHD)			DATA ADDRESS
					2556	*				
					2557	*	PARAMETER LIST TO LOAD COMPILER			
					2558	*				
0E6D	01			0E6D	2559	KRUCPL	DC AL1(@DGET)			READ FUNCTION
0E6E	0080			0E6F	2560		DC AL2(\$\$BCOM)			DISK ADDRESS
0E70	18			0E70	2561		DC AL1(\$\$@BCO)			SECTOR COUNT
0E71	0600			0E72	2562		DC AL2(\$\$KLD1)			DATA ADDRESS
					2563	*				
					2564	*	PARAMETER LIST TO LOAD KEDITN			
					2565	*				
0E73	01			0E73	2566	KRUEDT	DC AL1(@DGET)			READ FUNCTION
0E74	0188			0E75	2567		DC AL2(\$\$KEDI)			DISK ADDRESS
0E76	0E			0E76	2568		DC AL1(\$\$@KED)			SECTOR COUNT
0E77	0C00			0E78	2569		DC AL2(\$\$KLD3)			DATA ADDRESS
					2570	*				
					2571	*	PARAMETER LIST TO PRIME COMPILER			
					2572	*				
					2573	*RUPIM	\$DPL FUNC-@DGET,DADDR-#@#IO1,CNT-#@#IO,CADDR-B\$PTBF			
				0E79	2574+	KRUPIM	EQU *			DISK PARAMETER LIST
0E79	01			0E79	2575+		DC AL1(@DGET)			REQUESTED FUNCTION
0E7A	0459			0E7B	2576+		DC AL2(\$\$#IO1)			DISK ADDRESS
0E7C	01			0E7C	2577+		DC AL1(\$\$@#IO)			SECTOR COUNT
0E7D	1F00			0E7E	2578+		DC AL2(B\$PTBF)			BUFFER ADDRESS
					2579+	***	END OF EXPANSION ***			
					2580	*				
					2581	*	CONSTANTS USED IN KRUNIT			
					2582	*				
0E7F	FFFF			0E80	2583	KRUCSO	DC IL(@CADDR) '-1'			DECREMENTATION FACTOR
					2584	*				
					2585	*	PRIMARY / SECONDARY PARAMETERS USED IN KRUNIT			
					2586	*				
				0E81	2587	KRULGO	EQU *			
0E81	D9E4D5			0E83	2588	KRURUN	DC CL3 'RUN'			
				0E84	2589	KRULG1	EQU *			
0E84	E2E3C5D7			0E87	2590	KRUSTP	DC CL4 'STEP'			
				0E88	2591	KRULG2	EQU *			
0E88	60D3D6D5C7			0E8C	2592	KRULNG	DC CL5 '-LONG'			
				0E8D	2593	KRULG3	EQU *			
0E8D	60E2C8D6D9E3			0E92	2594	KRUSHT	DC CL6 '-SHORT'			
				0E93	2595	KRULG4	EQU *			

#KRUNI - KEYWORD COMMAND RUN

ERR LOC OBJECT CODE ADDR STMT SOURCE STATEMENT VER 15, MOD 00 03/07/20 PAGE 12

0E93	C1D3D3	0E95	2596	KRUALL	DC	CL3 'ALL'	
		0E96	2597	KRULG5	EQU	*	
0E96	C6D3D6E6	0E99	2598	KRUFLW	DC	CL4 'FLOW'	
		0E9A	2599	KRULG6	EQU	*	
0E9A	5C5D	0E9B	2600	KRUVAR	DC	CL2 '*')'	(*) IS THE FLAG TO TRACE ALL REFERENCES TO THE VARIABLE
		2601	*				
		0E9C	2602	KRULG7	EQU	*	
		2603	*				
		2604	*				
		2605	*				
		00C1	2606	KRUAL1	EQU	X 'C1'	EBCDIC 'A'
		00EA	2607	KRUAL2	EQU	X 'EA'	EBCDIC 'Z' PLUS 1
		00EF	2608	KRUNU1	EQU	X 'EF'	EBCDIC '0' MINUS 1
		00F9	2609	KRUNU2	EQU	X 'F9'	EBCDIC '9'
		005B	2610	KRUDOL	EQU	X '5B'	EBCDIC '\$'
		004D	2611	KRUBRC	EQU	X '4D'	EBCDIC '('
		005D	2612	KRUKET	EQU	X '5D'	EBCDIC ')'
		007C	2613	KRUATT	EQU	X '7C'	@ SIGN
		007B	2614	KRUPND	EQU	X '7B'	# SIGN
		0068	2615	KRUCOM	EQU	X '68'	EBCDIC '.'
		0080	2616	\$EDRUN	EQU	\$\$\$ERN	'RUN' FUNC SAVE FILE INDR
		0080	2617	KRUFLG	EQU	\$EDRUN	\$ INDICATOR
		06FF	2618	KRUIDR	EQU	\$\$XIND	'RUN' INDICATOR
		0001	2619	KRUONE	EQU	1	INCREMENTATION FACTOR OF 1
		0002	2620	KRUTWO	EQU	2	INCREMENTATION FACTOR OF 2
		0004	2621	KRUFOR	EQU	4	LOGICAL CYL DISPLACEMENT
		2622	*			\$CANI	

SCANIT - DELIMETER SCAN MODULE

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ERR LOC  OBJECT CODE      ADDR STMT SOURCE STATEMENT                VER 15, MOD 00  03/07/20  PAGE  13
2624+*****
2625+*   5703-XM1   COPYRIGHT IBM CORP. 1970                *
2626+*                                     REFER TO INSTRUCTIONS ON COPYRIGHT NOTICE, 120-2083 *
2627+*                                                                 *
2628+*****
2629+*STATUS                                                                 *
2630+*   VERSION 1 MODIFICATION 0                                          *
2631+*                                                                 *
2632+*FUNCTION                                                                 *
2633+*   THE FUNCTION OF SCANIT IS TO SCAN PAST VALID DELIMITERS AND      *
2634+*   RETURN A POINTER TO THE FIRST CHARACTER THAT'S NOT A DELIMITER.   *
2635+*                                                                 *
2636+*ENTRY POINTS                                                            *
2637+*   * THE ENTRY POINT IS SCANIT.                                       *
2638+*   * THE CALLING SEQUENCE IS AS FOLLOWS:                             *
2639+*       B          SCANIT                                               *
2640+*   WITH REGISTER 2 (@XR) POINTING TO THE FIRST CHARACTER TO BE      *
2641+*   EXAMINED.                                                            *
2642+*                                                                 *
2643+*INPUT                                                                    *
2644+*   NONE                                                                *
2645+*                                                                 *
2646+*OUTPUT                                                                    *
2647+*   NONE                                                                *
2648+*                                                                 *
2649+*EXTERNAL REFERENCES                                                       *
2650+*   $CAERR - ERROR CODE SAVE AREA                                       *
2651+*                                                                 *
2652+*EXITS, NORMAL                                                            *
2653+*   NORMAL EXIT FROM SCANIT IS TO THE BYTE FOLLOWING THE BRANCH TO    *
2654+*   SCANIT IN THE CALLING ROUTINE. THE PSR (REGISTER 4) WILL CONTAIN    *
2655+*   A ZERO IF NO DELIMITERS WERE FOUND OR A HIGH CONDITION IF ONE OR    *
2656+*   MORE DELIMITERS WERE SCANNED.                                         *
2657+*                                                                 *
2658+*EXITS, ERROR                                                            *
2659+*   ERROR EXIT FROM SCANIT IS TO THE BYTE FOLLOWING THE BRANCH TO    *
2660+*   SCANIT IN THE CALLING ROUTINE. THE PSR WILL CONTAIN A LOW          *
2661+*   CONDITION.                                                            *
2662+*                                                                 *
2663+*TABLES/WORKAREAS                                                         *
2664+*   * SCACNT - AREA CONTAINING NUMBERS OF DELIMITERS SCANNED            *
2665+*   * SCAMMA - LOCATION WHERE SCACOM MAY BE MOVED IF ONE COMMA IS ALSO *
2666+*   TO BE CONSIDERED A DELIMITER. MOVING SCACOF BACK INTO SCAMMA      *
2667+*   INDICATES THAT ONLY BLANKS SHOULD BE CONSIDERED DELIMITERS.       *
2668+*                                                                 *
2669+*ATTRIBUTES                                                                *
2670+*   RELOCATABLE AND RE-USABLE                                             *
2671+*                                                                 *
2672+*CHARACTER CODE DEPENDENCY                                                 *
2673+*   THE OPERATION OF THIS MODULE DOES NOT DEPEND UPON A PARTICULAR    *
2674+*   INTERNAL REPRESENTATION OF THE EXTERNAL CHARACTER SET.             *
2675+*                                                                 *
2676+*NOTES                                                                      *
2677+*   ERROR PROCEDURES                                                       *
2678+*   THE ONLY ERROR CONDITION DETECTED BY SCANIT IS THE CASE WHERE      *
2679+*   A CARRIAGE-RETURN CODE FOLLOWS A COMMA.  UPON RETURN TO THE      *

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SCANIT - DELIMETER SCAN MODULE

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ERR LOC  OBJECT CODE      ADDR STMT SOURCE STATEMENT                                VER 15, MOD 00  03/07/20  PAGE  14
2680+*      CALLING ROUTINE, @PSR WILL BE SET TO A LOW CONDITION, THE      *
2681+*      ERROR CODE IS SET IN $CAERR, AND MG WU BE POINTING TO THE      *
2682+*      CARRIAGE-RETURN CHARACTER.                                     *
2683+*      *                                                                 *
2684+*      REGISTER USAGE                                               *
2685+*      REGISTER 2 (@XR) IS USED AS A POINTER ACROSS THE AREA BEING   *
2686+*      SCANNED FOR DELIMITERS.                                       *
2687+*      *                                                                 *
2688+*      SAVED/RESTORED AREAS                                         *
2689+*      UPON ENTRY TO SCANIT, REGISTER 8 (@ARR) IS SAVED AND USED AS *
2690+*      THE RETURN ADDRESS.                                           *
2691+*      *                                                                 *
2692+*      MODIFICATION CONSIDERATIONS                                   *
2693+*      NONE                                                           *
2694+*      *                                                                 *
2695+*      REQUIRED MODULES                                               *
2696+*      * @SYSEQ - COMMON SYSTEM EQUATES                             *
2697+*      * @FXDEQ - FIXED NUCLEUS ADDRESSES EQUATES                     *
2698+*      *                                                                 *
2699+*      OTHER                                                           *
2700+*      SCANIT IS INITIALIZED TO BYPASS BLANKS ONLY. IF SCACOM IS     *
2701+*      MOVED TO SCAMMA, ONE COMMA WILL BE SCANNED ALONG WITH BLANKS.  *
2702+*      THE INSTRUCTION TO DO THIS IS AS FOLLOWS:                       *
2703+*      MVI    SCAMMA,SCACOM                                           *
2704+*      *                                                                 *
2705+*      TO DROP THE COMMA FROM ITS DELIMITER STATUS, SCACOF SHOULD BE   *
2706+*      MOVED TO SCAMMA, USING THE FOLLOWING INSTRUCTION:               *
2707+*      MVI    SCAMMA,SCACOF                                           *
2708+*****

2710+*
2711+*      EQUATES USED IN THIS SUBROUTINE
2712+*
0001 2713+SCAINC EQU    1          TO INCREMENT POINTER
0001 2714+SCACOM EQU   @BNE        SWITCH TO ALLOW SCANNING COMMA
0087 2715+SCACOF EQU   @UCB        SWITCH TO SET OFF THE INDICATON
2716+*      * FOR SCANNING A COMMA
0E9C 2717+SCANIT EQU   *          ENTRY POINT TO THIS SUBROUTINE
0E9C 34 08 0ED8      2718+      ST    SCA500+@OP1,@ARR          SAVE RETURN ADDRESS
0EA0 34 02 0EDA      2719+      ST    SCASVE,@XR              SAVE POINTER VALUE
0EA4 3C 04 03CD      2720+      MVI   $CAERR,@E110             SET ERROR CODE
0EA8 F2 87 03       2721+      J     SCA200                    GO TO PROCESS
0EAB E2 02 01       2722+SCA100 LA   SCAINC(,@XR),@XR          INCREMENT POINTER TO NEXT CHAR
0EAE BD 40 00       2723+SCA200 CLI  0(,@XR),@BLANK        IS THIS CHAR BLANK ?
0EB1 C0 81 0EAB     2724+      BE   SCA100                    YES, FETCH NEXT ONE
0EB5 BD 6B 00       2725+      CLI  0(,@XR),@COMMA        IS IT A COMMA ?
0EB8 F2 87 10       2726+SCA250 JC   SCA400,@UCB        UCS TO RETURN -- OR NOP IF
2727+*      * SCAMMA IS ACTIVE AND CHAR
0EBB E2 02 01       2728+SCA300 LA   SCAINC(,@XR),@XR          INCREMENT POINTER TO NEXT CHAR
0EBE BD 40 00       2729+      CLI  0(,@XR),@BLANK        IS THIS CHAR A BLANK ?
0EC1 C0 81 0EBB     2730+      BE   SCA300                    YES, FETCH NEXT ONE
0EC5 BD 1F 00       2731+      CLI  0(,@XR),@EOS+1        IS THIS EOS ?
0EC8 F2 82 0A       2732+      JL   SCA500                    IF NOT, SKIP ERROR ROUTINE
0ECB 34 02 0EDC     2733+SCA400 ST   SCACNT,@XR          SAVE NEW POINTER VALUE
0ECF 0F 01 0EDC 0EDA 2734+      SLC   SCACNT(2),SCASVE        SET PSR TO EQUAL IF POINTER

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SCANIT - DELIMETER SCAN MODULE

ERR LOC OBJECT CODE ADDR STMT SOURCE STATEMENT VER 15, MOD 00 03/07/20 PAGE 15

0ED5	C0 87 0000		2735+*			* NOT ADVANCED
			2736+SCA500 B	*-*		YES, RETURN
		0EB9	2737+SCAMMA EQU	SCA250+@Q		TO SET SCAN COMMA INDICATOR
			2738+*			
			2739+*	SAVE AREA		
			2740+*			
0ED9		0ED9	2741+SCASV1 EQU	*		FIRST BYTE OF SCASVE
0EDB		0EDA	2742+SCASVE DS	CL2		ORIGINAL POINTER VALUE SAVE
		0EDC	2743+SCACNT DS	CL2		SAVE AREA FOR TOTAL CHAR SCAN
			2744+***	END OF SCANIT		***

SCANIT - DELIMETER SCAN MODULE

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ERR LOC  OBJECT CODE      ADDR STMT SOURCE STATEMENT          VER 15, MOD 00  03/07/20  PAGE  16
      2746 *****
      2747 *   PATCH .1
      2748 *****
      2749 *
      2750 *   CALCULATE AREA LEFT IN THIS SECTOR
      2751 *
0EDD  2752 $$$L1 EQU   *           START OF PATCH AREA 1
0F00  2753          ORG   *,256,0   SET LOC CNTR TO NEXT SECTOR
0F00  2754 $$$T1 EQU   *           DEFINE ADDR OF SCTR BOUNDARY
0EDD  2755          ORG   $$$L1     SET LOC CNTR TO START OF
      2756 *                       * PATCH AREA
0EDD  2757 $$$S1 DS    CL($$$T1-$$$L1) PATCH AREA
      2758 *****
      2759 *** END OF EXPANSION ***
      2760          PRINT ON
FFFF  2761          END
    
```

TOTAL STATEMENTS IN ERROR IN THIS ASSEMBLY = 0

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
\$\$\$\$\$	001	0C00	2197	
\$\$\$\$\$1	035	0EFF	2757	
\$\$\$\$L1	001	0EDD	2752	2755 2757
\$\$\$\$T1	001	0F00	2754	2757
\$\$\$CMD	001	0020	0841	
\$\$\$DAT	001	0040	0840	
\$\$\$EPL	001	0091	0837	
\$\$\$ERN	001	0080	0891	2616
\$\$\$FUN	001	0010	0842	
\$\$\$NLN	001	00A0	0887	
\$\$\$STD	001	0081	0836	
\$\$\$BNLN	001	0605	0817	0819
\$\$CDBS	001	08C0	0867	
\$\$CDND	001	0666	0826	
\$\$CDRD	001	0890	0865	0867
\$\$CKEY	001	0603	0815	
\$\$CKFF	001	0B3D	0847	
\$\$COFF	001	0B44	0846	
\$\$CSNS	001	209C	0876	
\$\$DATB	001	0BBF	0848	
\$\$EOSA	001	0AFE	0845	
\$\$ERSK	001	1C00	0886	
\$\$FITS	001	1D00	0894	
\$\$FLIB	001	06FF	0893	
\$\$ILEN	001	0601	0811	0813 0817 2444* 2445*
\$\$ILHD	001	0600	0809	0811 2555
\$\$INLN	001	0607	0824	0826 0828
\$\$INND	001	06FA	0828	
\$\$KBDT	001	09E1	0835	0839
\$\$KBSN	001	09E2	0839	0844
\$\$KLD1	001	0600	0899	2562
\$\$KLD2	001	0700	0901	
\$\$KLD3	001	0C00	0903	2569
\$\$LPOS	001	09EB	0844	
\$\$PCNT	001	07E9	0860	
\$\$PLYN	001	2004	0874	
\$\$PRES	001	0890	0833	0835 0845 0846 0847 0848 0865
\$\$PRFL	001	2143	0878	
\$\$PRNT	001	0707	0854	0855 0859 0860
\$\$PRTN	001	0782	0855	
\$\$PSIO	001	07CE	0859	
\$\$PYCD	001	2200	0880	
\$\$PYMP	001	2000	0872	0874 0876 0878 0880
\$\$SLIB	001	1C00	0889	
\$\$TPCD	001	0606	0819	0824
\$\$UPAR	001	0602	0813	0815
\$\$WSPB	001	1E00	0892	
\$\$XIND	001	06FF	0890	0893 2369* 2618
\$\$ZERO	001	0000	0406	0407 0409 0410 0411 0415 0872
\$ABORT	001	0010	0518	2307
\$BASIC	001	0080	0576	2346
\$BIGCD	001	0080	0652	
\$BLDPL	001	0579	0785	0787
\$BLNOE	001	0569	0775	
\$BLOAD	001	0522	0766	0768 0771 0784 0785
\$BLRTN	001	0550	0774	0775

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
\$BRSV	001	03C5	0463	0464
\$BSADR	001	0587	0790	0792
\$BUFPT	001	03E3	0671	0672
\$CABLD	001	04B4	0744	0745
\$CAERK	001	0469	0721	0724 2353 2385 2392 2411 2469 2544
\$CAERR	001	03CD	0469	0471 2339* 2343* 2348* 2352* 2384* 2391* 2410* 2468* 2543* 2720*
\$CAIPL	001	049D	0740	0742
\$CALLI	001	0008	0661	
\$CARDI	001	0001	0432	
\$CARPL	001	04A1	0742	0744
\$CIENT	001	0483	0731	0732
\$CIEXT	001	0480	0730	0731
\$CIMSK	001	0476	0727	0730
\$CISUS	001	0496	0735	0740
\$CLBFR	001	0010	0619	
\$CMDKY	001	0008	0531	
\$CMODE	001	0002	0581	
\$CONFIG	001	03DD	0644	0654
\$CRPOS	001	03E2	0670	0671
\$CRTAD	001	044D	0709	0710
\$CRTAV	001	0002	0525	
\$CRTDN	001	0002	0549	
\$CRTIN	001	03D3	0546	0553
\$CRTNO	001	0004	0528	
\$CRTPU	001	0004	0550	
\$CRTSP	001	0008	0551	
\$CRTUP	001	0001	0548	
\$CRUSH	001	0080	0657	
\$CSDPL	001	050E	0756	0757
\$C0001	001	0464	0713	0719
\$DATE	001	043A	0694	0695
\$DBGUF	001	03E0	0656	0665
\$DBLOK	001	0001	0606	
\$DFDET	001	03E8	0677	0678
\$DISKN	001	0025	0409	2361 2436
\$DKERR	001	0008	0587	
\$DKSIZ	001	03D7	0631	0639 0680
\$DK100	001	0001	0633	
\$DK200	001	0002	0634	
\$DK400	001	0004	0635	
\$DK600	001	0008	0636	
\$DK800	001	0010	0637	
\$DPLSV	001	0449	0705	0707
\$DTNMB	001	0040	0452	
\$DTRDR	001	0040	0540	
\$EDRUN	001	0080	2616	2369 2617
\$ENDNU	001	0600	0799	0809 0833 0854 0890 0899 0901 0903
\$ERDPL	001	046F	0724	0726
\$ERFIL	001	0040	0479	
\$ERHRD	001	0004	0611	
\$ERKEY	001	0080	0483	
\$ERLOG	001	0345	0414	
\$ERMAD	001	0472	0726	0727
\$ERPND	001	0004	0584	
\$ERRCT	001	03CF	0485	
\$ERRPG	001	03CE	0473	

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
\$ERSFL	001	0035	0478	
\$ERSTK	001	0030	0476	
\$ER050	001	0363	0415	
\$ER1N2	001	0050	0481	
\$EXADR	001	0517	0759	0761
\$EXCMD	001	0001	0513	
\$EXFTR	001	043B	0695	0700
\$FCIND	001	0010	0591	
\$FDIND	001	0040	0598	
\$FEARR	001	0004	0407	
\$FEMAP	001	0588	0792	0793
\$FILIB	001	03DA	0642	0643
\$FITIN	001	0010	0567	
\$FUIND	001	0020	0596	
\$GUFIO	001	0583	0789	0790
\$GUFIR	001	0008	0441	
\$HISTE	001	042E	0692	0693
\$HIST1	001	0435	0693	0694
\$HRDER	001	0020	0537	
\$INDR1	001	03D4	0553	0579 2341 2346 2350
\$INDR2	001	03D5	0579	0604
\$INDR3	001	03D6	0604	0631
\$INLNO	001	03CF	0471	0473 0485 0492
\$INRPT	001	0020	0449	
\$IOIND	001	03D2	0520	0546
\$IOPGS	001	0010	0660	
\$IOYES	001	0002	0435	
\$IPLDV	001	05FF	0796	0799
\$IRKEY	001	0020	0659	
\$KEYBD	001	03E1	0665	0670
\$KEYCD	001	03C3	0429	0463
\$KEYDT	001	0040	0573	
\$KE090	001	00DE	0410	
\$KE130	001	01D5	0411	
\$KYBSY	001	0010	0446	
\$LDRTN	001	0571	0784	
\$LEVEL	001	03DF	0654	0656
\$LIST	001	0002	0608	
\$LMRGN	001	03C1	0424	0426
\$LNPTR	001	0080	0543	
\$LOADB	001	054A	0768	
\$LOADR	001	051A	0761	0764
\$LPRIO	001	03E9	0678	
\$LPROS	001	03E5	0673	0675
\$LPRP3	001	03E4	0672	0673
\$MOUNT	001	0020	0622	
\$MPDWN	001	0001	0522	
\$NEXTB	001	03E6	0675	0676
\$NEXTL	001	03E7	0676	0677
\$NOENB	001	0008	0614	
\$NOLST	001	0004	0438	
\$NUCBS	001	03C0	0421	0422
\$NWRKF	001	0080	0627	
\$NWRKR	001	0040	0624	
\$PASWD	001	042D	0691	0692
\$PAUSD	001	04BA	0745	0747

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
\$PAUSE	001	0002	0515	
\$PGMDT	001	0020	0570	2350
\$PGMST	001	0010	0534	
\$PKERT	001	0419	0689	0691
\$PLST1	001	0454	0710	0711
\$PLST2	001	045B	0711	0712
\$PLST3	001	0462	0712	0713
\$PRDEV	001	044B	0707	0709
\$PRESN	001	0002	0558	
\$PROCI	001	0001	0555	
\$PRPOS	001	03C2	0426	0429
\$PSDBR	001	04FA	0750	
\$PSDXR	001	04F2	0749	0750
\$PSTEP	001	0004	0516	
\$PSTMT	001	0008	0517	
\$PTCH1	001	03F5	0680	0684
\$READY	001	0080	0600	
\$REORD	001	0040	0658	
\$RLOAD	001	051E	0764	0766 2364 2370
\$RMRGN	001	03C0	0422	0424
\$RSTR	001	04D6	0747	0749 0751 0756
\$RUNIT	001	0001	0494	2318
\$SFAID	001	050D	0752	
\$SPRNT	001	0465	0719	0721
\$SRTRN	001	04FE	0751	0752
\$STEPT	001	0002	0495	2323
\$SWPCR	001	0511	0757	0759
\$TABLN	001	03CB	0466	0469
\$TFLOW	001	0008	0501	2403 2405
\$TRACE	001	0004	0496	2376
\$TRALL	001	0010	0502	2382 2408 2412
\$TROVR	001	054E	0771	0774
\$TRUNK	001	0080	0454	
\$TRVAR	001	0020	0503	2403 2408 2422 2431 2442 2446
\$UNMSK	001	048D	0732	0735
\$USRDR	001	03DC	0643	0644
\$VMDEF	001	0080	0507	
\$VOLF1	001	03FE	0686	0687
\$VOLF2	001	040E	0688	
\$VOLID	001	03F6	0684	0685 0689
\$VOLR1	001	03F6	0685	0686
\$VOLR2	001	0406	0687	0688
\$WAITF	001	057F	0787	0789
\$WFDEF	001	0040	0701	2337
\$WFLOK	001	0008	0564	
\$WFNME	001	0443	0700	0705 2337
\$WSIND	001	0004	0561	2341
\$XIND1	001	03D0	0492	0511 2355 2356*
\$XIND2	001	03D1	0511	0520 2307*
\$XIND3	001	03D8	0639	0642 2355*
\$XPREC	001	0040	0504	2530
\$XRSAV	001	03C7	0464	0466 2314
\$ZTRAD	001	05A2	0793	
\$12K	001	0004	0648	
\$16CKY	001	0008	0650	
\$16K	001	0002	0647	

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
\$22IMP	001	0001	0645	
###BL	001	0000	1424	
###CK	001	0000	1552	
###CN	001	0000	1520	
###CO	001	0000	1312	
###CS	001	0000	1372	
###DR	001	0000	1116	
###ER	001	0000	1316	
###FS	001	0000	1412	
###IN	001	0000	1556	
###PW	001	0000	1560	
###RS	001	0000	1392	
###SA	001	0000	1380	
###SS	001	0000	1376	
###VU	001	0600	1336	
###0T	001	0700	1108	
###1T	001	0000	1112	
###BCO	001	0600	1124	
###BOV	001	0800	1396	
###DPR	001	0700	1132	
###DRE	001	0889	1148	
###DSP	001	2800	1168	
###ECM	001	0C00	1428	
###EFK	001	0C00	1448	
###ERR	001	0C00	1420	
###EXM	001	0C00	1308	
###FIL	001	0E00	1388	
###FIS	001	0E00	1384	
###FML	001	0200	1516	
###FMS	001	0200	1356	
###GRA	001	0889	1280	
###GUF	001	0C00	1416	
###INL	001	0600	1496	
###INS	001	0600	1120	
###KAL	001	0C00	1284	
###KCA	001	0C00	1500	
###KCH	001	0C00	1252	
###KCN	001	0C00	1368	
###KCT	001	0C00	1220	
###KDE	001	0C00	1216	
###KDI	001	0D00	1296	
###KDN	001	0C00	1204	
###KDO	001	0E00	1300	
###KED	001	0C00	1140	
###KEN	001	0C00	1144	
###KEX	001	0C00	1164	
###KGO	001	0C00	1136	
###KHE	001	0C00	1320	
###KKE	001	0C00	1548	
###KLI	001	0C00	1224	
###KLL	001	0920	1524	
###KLO	001	0C00	1228	
###KME	001	0D00	1208	
###KMO	001	0C00	1152	
###KNA	001	0C00	1264	
###KOV	001	0E00	1184	

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
###KPA	001	0C00	1160	
###KPO	001	0C00	1248	
###KPR	001	0C00	1272	
###KRE	001	0C00	1192	
###KRL	001	0700	1288	
###KRM	001	0C00	1156	
###KRN	001	1000	1176	
###KRO	001	0D00	1180	
###KRS	001	0C00	1504	
###KRU	001	0C00	1200	2196
###KRV	001	0800	1292	
###KSA	001	0C00	1236	
###KSE	001	0E00	1276	
###KSO	001	0C20	1328	
###KSS	001	0C00	1260	
###KSV	001	0980	1256	
###KSY	001	0C00	1268	
###KWI	001	0C00	1196	
###KWR	001	0C00	1188	
###LOA	001	0600	1128	
###MIP	001	0C00	1324	
###SDS	001	0C00	1436	
###SFF	001	0E00	1440	
###SFL	001	0F00	1432	
###SFO	001	1500	1404	
###SFS	001	0C00	1400	
###SPA	001	0C00	1240	
###SPO	001	0806	1244	
###SPS	001	0C00	1232	
###STR	001	1600	1408	
###TDC	001	1000	1212	
###TSY	001	1000	1172	
###TVK	001	0FC0	1348	
###UAL	001	0C00	1364	
###UAT	001	0900	1460	
###UCD	001	0900	1468	
###UCN	001	0C00	1452	
###UCP	001	0700	1456	
###UDE	001	0C00	1472	
###UDI	001	0C00	1476	
###UEX	001	0C00	1360	
###UIN	001	0C00	1464	
###UPA	001	0C00	1444	
###UPO	001	0C00	1512	
###UPT	001	0C00	1508	
###VCR	001	2000	1304	
###VLO	001	0600	1340	
###VOD	001	0600	1344	
###VVM	001	0000	1352	
###VXI	001	0600	1332	
###ZDU	001	1100	1484	
###ZLB	001	1100	1528	
###ZLO	001	1100	1488	
###ZLV	001	0F00	1544	
###ZL1	001	0F00	1532	
###ZL2	001	0F00	1536	

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
###ZL3	001	0C00	1540	
###ZTR	001	1000	1480	
###ZUT	001	0C00	1492	
##BLN	001	18D4	1423	
##CKT	001	2118	1551	
##CNF	001	2000	1519	
##COR	001	0800	1311	
##CSA	001	1000	1371	
##DRT	001	0000	1115	
##ERM	001	0928	1315	
##FSP	001	1880	1411	
##INV	001	212C	1555	
##PWR	001	2300	1559	
##RSP	001	1780	1391	
##SAV	001	1180	1379	
##SSA	001	1128	1375	
##VUF	001	0B08	1335	
##0TR	001	0000	1107	
##1TR	001	0080	1111	
##@BL	001	0001	1425	
##@CK	001	0004	1553	
##@CN	001	0001	1521	
##@CO	001	003A	1313	
##@CS	001	003A	1373	
##@DR	001	0008	1117	
##@ER	001	0032	1317	
##@FS	001	0030	1413	
##@IN	001	003A	1557	
##@PW	001	00C0	1561	
##@RS	001	0030	1393	
##@SA	001	0108	1381	
##@SS	001	0001	1377	
##@VU	001	0002	1337	
##@0T	001	0018	1109	
##@1T	001	0018	1113	
##@BCO	001	0018	1125	2561
##@BOV	001	0018	1397	
##@DPR	001	0005	1133	
##@DRE	001	0001	1149	
##@DSP	001	0004	1169	
##@ECM	001	0006	1429	
##@EFK	001	0002	1449	
##@ERR	001	0003	1421	
##@EXM	001	0003	1309	
##@FIL	001	0009	1389	
##@FIS	001	0009	1385	
##@FML	001	0052	1517	
##@FMS	001	0052	1357	
##@GRA	001	0003	1281	
##@GUF	001	0010	1417	
##@INL	001	0010	1497	
##@INS	001	0010	1121	
##@KAL	001	000F	1285	
##@KCA	001	000C	1501	
##@KCH	001	000C	1253	
##@KCN	001	0010	1369	

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
#\$@KCT	001	0009	1221	
#\$@KDE	001	0010	1217	
#\$@KDI	001	0005	1297	
#\$@KDN	001	0010	1205	
#\$@KDO	001	000C	1301	
#\$@KED	001	000E	1141	2568
#\$@KEN	001	0006	1145	
#\$@KEX	001	0003	1165	
#\$@KGO	001	0002	1137	
#\$@KHE	001	000C	1321	
#\$@KKE	001	0006	1549	
#\$@KLI	001	0008	1225	
#\$@KLL	001	0001	1525	
#\$@KLO	001	0008	1229	
#\$@KME	001	0003	1209	
#\$@KMO	001	0004	1153	
#\$@KNA	001	0008	1265	
#\$@KOV	001	0009	1185	
#\$@KPA	001	0005	1161	
#\$@KPO	001	000D	1249	
#\$@KPR	001	0009	1273	
#\$@KRE	001	0002	1193	
#\$@KRL	001	0004	1289	
#\$@KRM	001	0003	1157	
#\$@KRN	001	0003	1177	
#\$@KRO	001	000A	1181	
#\$@KRS	001	000A	1505	
#\$@KRU	001	0003	1201	
#\$@KRV	001	000D	1293	
#\$@KSA	001	0004	1237	
#\$@KSE	001	0004	1277	
#\$@KSO	001	000D	1329	
#\$@KSS	001	000B	1261	
#\$@KSV	001	0002	1257	
#\$@KSY	001	000F	1269	
#\$@KWI	001	0002	1197	
#\$@KWR	001	0002	1189	
#\$@LOA	001	0013	1129	
#\$@MIP	001	000D	1325	
#\$@SDS	001	0004	1437	
#\$@SFF	001	0008	1441	
#\$@SFL	001	0005	1433	
#\$@SFO	001	0003	1405	
#\$@SFS	001	0011	1401	
#\$@SPA	001	0004	1241	
#\$@SPO	001	0003	1245	
#\$@SPS	001	0001	1233	
#\$@STR	001	0002	1409	
#\$@TDC	001	0003	1213	
#\$@TSY	001	0003	1173	
#\$@TVK	001	0001	1349	
#\$@UAL	001	0011	1365	
#\$@UAT	001	000C	1461	
#\$@UCD	001	000B	1469	
#\$@UCN	001	0009	1453	
#\$@UCP	001	000F	1457	

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
#\$@UDE	001	000E	1473	
#\$@UDI	001	0008	1477	
#\$@UEX	001	000E	1361	
#\$@UIN	001	000F	1465	
#\$@UPA	001	0004	1445	
#\$@UPO	001	0005	1513	
#\$@UPT	001	0012	1509	
#\$@VCR	001	0008	1305	
#\$@VLO	001	0002	1341	
#\$@VOD	001	0016	1345	
#\$@VVM	001	0030	1353	
#\$@VXI	001	0002	1333	
#\$@ZDU	001	0008	1485	
#\$@ZLB	001	0002	1529	
#\$@ZLO	001	000C	1489	
#\$@ZLV	001	0006	1545	
#\$@ZL1	001	0007	1533	
#\$@ZL2	001	000D	1537	
#\$@ZL3	001	000A	1541	
#\$@ZTR	001	0001	1481	
#\$@ZUT	001	0014	1493	
#\$BCOM	001	0080	1123	2560
#\$BOLV	001	1780	1395	
#\$DPRI	001	014C	1131	
#\$DREA	001	0200	1147	
#\$DSPL	001	0240	1167	
#\$ECMA	001	1900	1427	
#\$EFKE	001	1990	1447	
#\$ERRP	001	18C0	1419	
#\$EXMS	001	07D4	1307	
#\$FILN	001	1724	1387	
#\$FIST	001	1700	1383	
#\$FMLN	001	1E00	1515	
#\$FMST	001	0D00	1355	
#\$GRAP	001	0690	1279	
#\$GUFU	001	1880	1415	
#\$INLN	001	1C84	1495	
#\$INST	001	0020	1119	
#\$KALL	001	06A4	1283	
#\$KCAL	001	1CC4	1499	
#\$KCHA	001	053C	1251	
#\$KCND	001	0F80	1367	
#\$KCTL	001	03BC	1219	
#\$KDEL	001	035C	1215	
#\$KDIS	001	0744	1295	
#\$KDNT	001	0300	1203	
#\$KDOV	001	0780	1299	
#\$KEDI	001	0188	1139	2567
#\$KENA	001	01C4	1143	
#\$KEXT	001	0234	1163	
#\$KGOS	001	0180	1135	
#\$KHEL	001	0A30	1319	
#\$KKEY	001	2100	1547	
#\$KLIS	001	0400	1223	
#\$KLLA	001	2004	1523	
#\$KLOG	001	0444	1227	

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
#\$KMER	001	030C	1207	
#\$KMOU	001	0204	1151	
#\$KNAM	001	05C0	1263	
#\$KOVN	001	0290	1183	
#\$KPAS	001	0220	1159	
#\$KPOO	001	0508	1247	
#\$KPRT	001	063C	1271	
#\$KREA	001	02BC	1191	
#\$KRLA	001	0700	1287	
#\$KRMO	001	0214	1155	
#\$KRNU	001	0280	1175	
#\$KROV	001	028C	1179	
#\$KRSU	001	1D24	1503	
#\$KRUN	001	02CC	1199	
#\$KRVL	001	0710	1291	
#\$KSAV	001	0488	1235	
#\$KSET	001	0680	1275	
#\$KSOV	001	0AC8	1327	
#\$KSSP	001	0594	1259	
#\$KSVL	001	058C	1255	
#\$KSYM	001	0600	1267	
#\$KWID	001	02C4	1195	
#\$KWRI	001	02B4	1187	
#\$LOAD	001	0100	1127	
#\$MIPP	001	0A80	1323	
#\$SDSY	001	192C	1435	
#\$SFFI	001	193C	1439	
#\$SFLO	001	1918	1431	
#\$SFOV	001	1844	1403	
#\$SFSY	001	1800	1399	
#\$SPAC	001	04CC	1239	
#\$SPOV	001	04DC	1243	
#\$SPSY	001	0484	1231	
#\$STRO	001	1850	1407	
#\$TDCK	001	0350	1211	
#\$TSYK	001	0250	1171	
#\$TVKB	001	0BAC	1347	
#\$UALL	001	0F00	1363	
#\$UATR	001	1A38	1459	
#\$UCDI	001	1AD8	1467	
#\$UCNF	001	19B8	1451	
#\$UCPL	001	19DC	1455	
#\$UDEL	001	1B24	1471	
#\$UDIS	001	1B5C	1475	
#\$UEXL	001	0EA8	1359	
#\$UINI	001	1A88	1463	
#\$UPAC	001	1980	1443	
#\$UPOV	001	1D24	1511	
#\$UPTF	001	1D5C	1507	
#\$VCRT	001	07B4	1303	
#\$VLOA	001	0B80	1339	
#\$VODK	001	0B88	1343	
#\$VVMR	001	0C00	1351	
#\$VXIT	001	0B00	1331	
#\$ZDUM	001	1BA4	1483	
#\$ZLBM	001	2008	1527	

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
#\$ZLOA	001	1BC4	1487	
#\$ZLVR	001	20B0	1543	
#\$ZL1M	001	2010	1531	
#\$ZL2M	001	2030	1535	
#\$ZL3M	001	2088	1539	
#\$ZTRA	001	1B9C	1479	
#\$ZUTM	001	1C14	1491	
##DNEA	001	0001	0957	
##DNEF	001	0003	0958	
##DNER	001	0005	0959	
##DNE1	001	0004	0956	
##DNHC	001	0000	0953	
##DNHR	001	0003	0955	
##DNHY	001	0001	0954	
##DPEA	001	0009	0931	
##DPEN	001	0007	0930	
##DPER	001	000B	0932	
##DPE1	001	0004	0929	
##DPHC	001	0000	0927	
##DPHR	001	0003	0928	
##DUEA	001	0009	0942	
##DUED	001	0012	0947	
##DUEF	001	000B	0943	
##DUEH	001	002B	0948	
##DUEI	001	000C	0944	
##DUEL	001	000F	0946	
##DUEN	001	0007	0941	
##DUER	001	0031	0949	
##DUES	001	000D	0945	
##DUE1	001	000C	0940	
##DUHA	001	0001	0936	
##DUHB	001	0003	0937	
##DUHC	001	0004	0938	
##DUHR	001	000B	0939	
##LAAA	001	0002	0968	
##LAHC	001	0001	0967	
##LN	001	0001	0996	
##LNE	001	0006	1002	
##LNEF	001	0002	1000	
##LNEZ	001	0002	1001	
##LNH	001	0004	0999	
##LNHY	001	0001	0997	
##LNHZ	001	0002	0998	
##LP	001	0004	0972	
##LPE	001	000C	0977	
##LPEN	001	0008	0974	
##LPEZ	001	0002	0975	
##LPH	001	0004	0976	
##LPHZ	001	0003	0973	
##LU	001	0002	0981	
##LUE	001	0032	0992	
##LUED	001	0003	0989	
##LUEF	001	0002	0985	
##LUEH	001	0019	0990	
##LUEI	001	0001	0986	
##LUEL	001	0002	0988	

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
##LUEN	001	0008	0984	
##LUES	001	0001	0987	
##LUEZ	001	0006	0991	
##LUH	001	000C	0983	
##LUHZ	001	0007	0982	
##MNHM	001	002A	1025	
##MPHM	001	0055	1010	
##MUEG	001	0020	1017	
##MUEK	001	0040	1016	
##MUEP	001	0080	1015	
##MUER	001	0008	1019	
##MUEV	001	0002	1021	
##MUEX	001	0010	1018	
##MUE0	001	0004	1020	
##MUHM	001	000A	1014	
##RN	001	0000	0916	
##RP	001	0001	0917	
##R1	001	0007	0919	
##R2	001	0005	0918	
#@#BAD	001	0455	1052	
#@#IO1	001	0459	1060	2576
#@#IO2	001	045D	1061	
#@#TAT	001	0941	1088	
#@#TBA	001	09A1	1092	
#@#TFS	001	0941	1086	
#@#TSY	001	0941	1090	
#@#VFP	001	0700	1078	
#@#VLP	001	093D	1081	
#@#WDB	001	050C	1073	
#@#WFT	001	0500	1071	
##@#BA	001	0001	1053	
##@#IO	001	0001	1065	2577
##@#SC	001	0002	1062	
##@#TA	001	0010	1089	
##@#TB	001	0010	1093	
##@#TS	001	0005	1091	
##@#TW	001	0020	1087	
##@#VM	001	0100	1082	
##@#WD	001	00BD	1074	
##@#WF	001	0003	1072	
##@#04	001	0004	1064	
##@#08	001	0008	1063	
##@#BOV	001	0018	1041	
##@#ECM	001	0006	1055	
##@#ERR	001	0003	1049	
##@#GUF	001	0010	1045	
##@#LDS	001	0002	1051	
##@#SDS	001	0004	1047	
##@#SFF	001	0008	1059	
##@#SFL	001	0005	1057	
##@#SFO	001	0005	1067	
##@#SFS	001	0011	1043	
##@#VSF	001	0010	1095	
##@#VSL	001	000F	1096	
##@#VTR	001	0001	1080	
#@#BOVL	001	0400	1040	

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
#@ECMA	001	0481	1054	
#@ERRP	001	0441	1048	
#@GUFU	001	0401	1044	
#@LDSV	001	044D	1050	
#@SDSY	001	04AD	1046	
#@SFFI	001	04BD	1058	
#@SFLO	001	0449	1056	
#@SFOV	001	04C4	1066	
#@SFSY	001	0480	1042	
#@VSFI	001	09A1	1094	
#@VTRL	001	0708	1079	
#@WAF1	001	0401	1039	
#@WAR1	001	0400	1038	
#KRUN	001	0C07	2200	
#KRUNI	001	0000	0001	
@@E001	001	0000	2098	2100
@@E003	001	0001	2100	2102
@@E004	001	0002	2102	2104
@@E005	001	0003	2104	2106
@@E006	001	0004	2106	2108
@@E007	001	0005	2108	2110
@@E008	001	0006	2110	2112
@@E009	001	0007	2112	2114
@@E010	001	0008	2114	2116
@@E011	001	0009	2116	2118
@@E012	001	000A	2118	2120
@@E013	001	000B	2120	2122
@@E014	001	000C	2122	2124
@@E015	001	000D	2124	2126
@@E016	001	000E	2126	2128
@@E017	001	000F	2128	2130
@@E018	001	0010	2130	2132
@@E019	001	0011	2132	2134
@@E020	001	0012	2134	2136
@@E021	001	0013	2136	2138
@@E023	001	0014	2138	2140
@@E024	001	0015	2140	2142
@@E025	001	0016	2142	2144
@@E026	001	0017	2144	2146
@@E027	001	0018	2146	2148
@@E028	001	0019	2148	2150
@@E029	001	001A	2150	2152
@@E030	001	001B	2152	2154
@@E031	001	001C	2154	2156
@@E032	001	001D	2156	2158
@@E035	001	001E	2158	2160
@@E036	001	001F	2160	2162
@@E037	001	0020	2162	2164
@@E038	001	0021	2164	2166
@@E039	001	0022	2166	2168
@@E040	001	0023	2168	2170
@@E041	001	0024	2170	2172
@@E042	001	0025	2172	2174
@@E043	001	0026	2174	2176
@@E044	001	0027	2176	2178
@@E045	001	0028	2178	2180

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
@@E046	001	0029	2180	2182
@@E060	001	002A	2182	2184
@@E080	001	002B	2184	
@@E100	001	0000	1570	1572
@@E101	001	0001	1572	1574
@@E102	001	0002	1574	1576
@@E103	001	0003	1576	1578
@@E110	001	0004	1578	1580 2720
@@E112	001	0005	1580	1582
@@E113	001	0006	1582	1584
@@E114	001	0007	1584	1586
@@E115	001	0008	1586	1588
@@E116	001	0009	1588	1590
@@E117	001	000A	1590	1592
@@E120	001	000B	1592	1594
@@E122	001	000C	1594	1596
@@E123	001	000D	1596	1598
@@E124	001	000E	1598	1600
@@E129	001	000F	1600	1602
@@E130	001	0010	1602	1604
@@E131	001	0011	1604	1606 2384
@@E133	001	0012	1606	1608
@@E134	001	0013	1608	1610 2410
@@E135	001	0014	1610	1612
@@E136	001	0015	1612	1614
@@E137	001	0016	1614	1616
@@E138	001	0017	1616	1618
@@E139	001	0018	1618	1620
@@E142	001	0019	1620	1622
@@E143	001	001A	1622	1624 2543
@@E150	001	001B	1624	1626 2391
@@E151	001	001C	1626	1628 2468
@@E160	001	001D	1628	1630
@@E162	001	001E	1630	1632
@@E163	001	001F	1632	1634
@@E164	001	0020	1634	1636
@@E200	001	0021	1636	1638
@@E205	001	0022	1638	1640
@@E210	001	0023	1640	1642
@@E211	001	0024	1642	1644
@@E212	001	0025	1644	1646
@@E213	001	0026	1646	1648
@@E215	001	0027	1648	1650
@@E216	001	0028	1650	1652
@@E217	001	0029	1652	1654
@@E220	001	002A	1654	1656 2339
@@E221	001	002B	1656	1658
@@E222	001	002C	1658	1660
@@E223	001	002D	1660	1662
@@E225	001	002E	1662	1664
@@E226	001	002F	1664	1666 2343
@@E227	001	0030	1666	1668 2348 2352
@@E228	001	0031	1668	1670
@@E229	001	0032	1670	1672
@@E230	001	0033	1672	1674
@@E232	001	0034	1674	1676

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
@@E234	001	0035	1676	1678
@@E237	001	0036	1678	1680
@@E240	001	0037	1680	1682
@@E241	001	0038	1682	1684
@@E242	001	0039	1684	1686
@@E248	001	003A	1686	1688
@@E249	001	003B	1688	1690
@@E250	001	003C	1690	1692
@@E251	001	003D	1692	1694
@@E252	001	003E	1694	1696
@@E253	001	003F	1696	1698
@@E254	001	0040	1698	1700
@@E255	001	0041	1700	1702
@@E256	001	0042	1702	1704
@@E300	001	0043	1704	1706
@@E301	001	0044	1706	1708
@@E302	001	0045	1708	1710
@@E303	001	0046	1710	1712
@@E304	001	0047	1712	1714
@@E305	001	0048	1714	1716
@@E308	001	0049	1716	1718
@@E310	001	004A	1718	1720
@@E315	001	004B	1720	1722
@@E316	001	004C	1722	1724
@@E320	001	004D	1724	1726
@@E325	001	004E	1726	1728
@@E330	001	004F	1728	1730
@@E335	001	0050	1730	1732
@@E338	001	0051	1732	1734
@@E340	001	0052	1734	1736
@@E350	001	0053	1736	1738
@@E351	001	0054	1738	1740
@@E352	001	0055	1740	1742
@@E360	001	0056	1742	1744
@@E361	001	0057	1744	1746
@@E362	001	0058	1746	1748
@@E371	001	0059	1748	1750
@@E380	001	005A	1750	1752
@@E390	001	005B	1752	1754
@@E400	001	005C	1754	1756
@@E410	001	005D	1756	1758
@@E415	001	005E	1758	1760
@@E417	001	005F	1760	1762
@@E420	001	0060	1762	1764
@@E430	001	0061	1764	1766
@@E432	001	0062	1766	1768
@@E433	001	0063	1768	1770
@@E450	001	0064	1770	1772
@@E451	001	0065	1772	1774
@@E460	001	0066	1774	1776
@@E461	001	0067	1776	1778
@@E464	001	0068	1778	1780
@@E465	001	0069	1780	1782
@@E466	001	006A	1782	1784
@@E467	001	006B	1784	1786
@@E469	001	006C	1786	1788

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
@@E470	001	006D	1788	1790
@@E471	001	006E	1790	1792
@@E473	001	006F	1792	1794
@@E474	001	0070	1794	1796
@@E475	001	0071	1796	1798
@@E476	001	0072	1798	1800
@@E477	001	0073	1800	1802
@@E478	001	0074	1802	1804
@@E479	001	0075	1804	1806
@@E480	001	0076	1806	1808
@@E481	001	0077	1808	1810
@@E482	001	0078	1810	1812
@@E483	001	0079	1812	1814
@@E484	001	007A	1814	1816
@@E485	001	007B	1816	1818
@@E486	001	007C	1818	1820
@@E487	001	007D	1820	1822
@@E488	001	007E	1822	1824
@@E489	001	007F	1824	1826
@@E490	001	0080	1826	1828
@@E491	001	0081	1828	1830
@@E492	001	0082	1830	1832
@@E493	001	0083	1832	1834
@@E494	001	0084	1834	1836
@@E495	001	0085	1836	1838
@@E496	001	0086	1838	1840
@@E497	001	0087	1840	1842
@@E498	001	0088	1842	1844
@@E500	001	0089	1844	1846
@@E501	001	008A	1846	1848
@@E530	001	008B	1848	1850
@@E531	001	008C	1850	1852
@@E535	001	008D	1852	1854
@@E540	001	008E	1854	1856
@@E541	001	008F	1856	1858
@@E542	001	0090	1858	1860
@@E543	001	0091	1860	1862
@@E544	001	0092	1862	1864
@@E545	001	0093	1864	1866
@@E546	001	0094	1866	1868
@@E547	001	0095	1868	1870
@@E548	001	FFFF	2074	
@@E549	001	0096	1870	1872
@@E550	001	0097	1872	1874
@@E551	001	0098	1874	1876
@@E552	001	0099	1876	1878
@@E553	001	009A	1878	1880
@@E554	001	009B	1880	1882
@@E555	001	009C	1882	1884
@@E556	001	009D	1884	1886
@@E558	001	009E	1886	1888
@@E570	001	009F	1888	1890
@@E571	001	00A0	1890	1892
@@E572	001	00A1	1892	1894
@@E573	001	00A2	1894	1896
@@E574	001	00A3	1896	1898

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
@@E575	001	FFFF	2076	
@@E578	001	00A4	1898	1900
@@E579	001	FFFF	2078	
@@E580	001	FFFF	2080	
@@E585	001	00A5	1900	1902
@@E595	001	FFFF	2082	
@@E597	001	FFFF	2084	
@@E598	001	FFFF	2086	
@@E600	001	00A6	1902	1904
@@E601	001	00A7	1904	1906
@@E602	001	00A8	1906	1908
@@E603	001	00A9	1908	1910
@@E604	001	00AA	1910	1912
@@E606	001	00AB	1912	1914
@@E607	001	00AC	1914	1916
@@E608	001	00AD	1916	1918
@@E609	001	00AE	1918	1920
@@E610	001	00AF	1920	1922 1930
@@E611	001	00B0	1922	1924
@@E612	001	00B1	1924	1926
@@E613	001	00B2	1926	1928
@@E614	001	00B3	1928	
@@E700	001	00B0	1930	1932
@@E701	001	00B1	1932	1934
@@E710	001	00B2	1934	1936
@@E712	001	00B3	1936	1938
@@E713	001	00B4	1938	1940
@@E714	001	00B5	1940	1942
@@E715	001	00B6	1942	1944
@@E716	001	00B7	1944	1946
@@E717	001	00B8	1946	1948
@@E718	001	00B9	1948	1950
@@E720	001	00BA	1950	1952
@@E721	001	00BB	1952	1954
@@E723	001	00BC	1954	1956
@@E724	001	00BD	1956	1958
@@E725	001	00BE	1958	1960
@@E726	001	00BF	1960	1962
@@E727	001	00C0	1962	1964
@@E728	001	00C1	1964	1966
@@E729	001	00C2	1966	1968
@@E730	001	00C3	1968	1970
@@E732	001	00C4	1970	1972
@@E752	001	00C5	1972	1974
@@E753	001	00C6	1974	1976
@@E754	001	00C7	1976	1978
@@E755	001	00C8	1978	1980
@@E756	001	00C9	1980	1982
@@E757	001	00CA	1982	1984
@@E758	001	00CB	1984	1986
@@E759	001	00CC	1986	1988
@@E760	001	00CD	1988	1990
@@E761	001	00CE	1990	1992
@@E762	001	00CF	1992	1994
@@E763	001	00D0	1994	1996
@@E764	001	00D1	1996	1998

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
@@E765	001	00D2	1998	2000
@@E766	001	00D3	2000	2002
@@E767	001	00D4	2002	2004
@@E768	001	00D5	2004	2006
@@E769	001	00D6	2006	2008
@@E770	001	00D7	2008	2010
@@E771	001	00D8	2010	2012
@@E772	001	00D9	2012	2014
@@E773	001	00DA	2014	2016
@@E774	001	00DB	2016	2018
@@E775	001	00DC	2018	2020
@@E776	001	00DD	2020	2022
@@E777	001	00DE	2022	2024
@@E778	001	00DF	2024	2026
@@E779	001	00E0	2026	2028
@@E780	001	00E1	2028	2030
@@E781	001	00E2	2030	2032
@@E782	001	00E3	2032	2034
@@E783	001	00E4	2034	2036
@@E784	001	00E5	2036	2038
@@E785	001	00E6	2038	2040
@@E786	001	00E7	2040	2042
@@E790	001	00E8	2042	2044
@@E791	001	00E9	2044	2046
@@E792	001	00EA	2046	2048
@@E793	001	00EB	2048	2050
@@E794	001	00EC	2050	2052
@@E795	001	00ED	2052	2054
@@E796	001	00EE	2054	2056
@@E797	001	00EF	2056	2058
@@E798	001	00F0	2058	2060
@@E800	001	FFFF	2088	
@@E801	001	FFFF	2090	
@@E802	001	FFFF	2092	
@@E803	001	FFFF	2094	
@@E804	001	FFFF	2096	
@@E900	001	00F1	2060	2062
@@E901	001	00F2	2062	2064
@@E902	001	00F3	2064	2066
@@E903	001	00F4	2066	2068
@@E905	001	00F5	2068	2070
@@E906	001	00F6	2070	2072
@@E910	001	00F7	2072	
@ALTFI	001	0001	0249	
@ARR	001	0008	0016	2501 2525 2718
@ASIGN	001	007C	0071	
@ASTER	001	005C	0069	
@BCRDL	001	0050	0088	
@BE	001	0081	0043	
@BF	001	0090	0052	
@BH	001	0084	0041	
@BKSPC	001	0010	0345	
@BL	001	0082	0042	
@BLANK	001	0040	0065	2536 2545 2723 2729
@BM	001	0082	0054	
@BNE	001	0001	0046	2714

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
@BNH	001	0004	0044	
@BNL	001	0002	0045	
@BNM	001	0002	0057	
@BNOL	001	0020	0050	
@BNOZ	001	0008	0049	
@BNP	001	0004	0056	
@BNZ	001	0001	0058	
@BOL	001	00A0	0048	
@BOZ	001	0088	0047	
@BP	001	0084	0053	
@BR	001	0001	0013	2308* 2309 2315 2316 2321 2336 2397 2400 2465 2474 2490 2510 2527 2532
@BT	001	0010	0051	
@BZ	001	0081	0055	
@BZ37B	001	00F2	0358	
@B1	001	0001	0063	
@CADDR	001	0002	0141	2445 2583
@CARDL	001	0060	0087	0826
@CC37B	001	0000	0354	
@CD37B	001	00F0	0372	
@CHARA	001	00C1	0072	
@CHARF	001	00C6	0073	
@CHARR	001	00D9	0074	
@CHARZ	001	00E9	0075	
@CKY01	001	0001	0307	
@CKY02	001	0002	0308	
@CKY03	001	0003	0309	
@CKY04	001	0004	0310	
@CKY05	001	0005	0311	
@CKY06	001	0006	0312	
@CKY07	001	0007	0313	
@CKY08	001	0008	0314	
@CKY09	001	0009	0315	
@CKY10	001	000A	0316	
@CKY11	001	000B	0317	
@CKY12	001	000C	0318	
@CKY13	001	000D	0319	
@CKY14	001	000E	0320	
@CKY15	001	000F	0321	
@CKY16	001	0010	0322	
@CLOFF	001	0010	0094	
@CLON	001	0011	0093	
@CMLON	001	0001	0325	
@CMOFF	001	0000	0324	
@COMMA	001	006B	0066	2725
@CPLUS	001	004E	0079	
@CP37B	001	0004	0385	
@CRERR	001	0090	0340	
@CRPRY	001	0004	0344	
@CRTDS	001	0092	0337	
@CRTQ	001	0090	0339	
@CURSR	001	0040	0341	
@DADDR	001	0002	0139	
@DBFR1	001	0004	0128	
@DBFR2	001	0005	0129	
@DBUSY	001	0002	0243	

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
@DCALK	001	0001	0081	
@DCBCY	001	0009	0114	
@DCBT1	001	0050	0116	
@DCFLN	001	0004	0227	
@DCNT	001	0003	0127	
@DCRID	001	0001	0241	
@DCST1	001	0040	0115	
@DCTRL	001	0000	0124	
@DCTRW	001	0000	0240	
@DCWID	001	0001	0237	
@DCYL	001	0001	0125	
@DCYMV	001	0001	0228	
@DD2	001	0003	0030	
@DEFLG	001	0002	0250	
@DERCE	001	0020	0280	
@DERD2	001	0008	0273	
@DEREQ	001	0010	0272	
@DERIN	001	0040	0270	
@DERMA	001	0020	0271	
@DERNR	001	0004	0274	
@DERR	001	0000	0244	
@DERSC	001	0001	0276	
@DERTC	001	0002	0275	
@DFCR	001	0006	0230	
@DFDR	001	0004	0231	
@DGET	001	0001	0133	2559 2566 2575
@DHARD	001	0000	0258	
@DLNCT	001	000F	0343	
@DLNLG	001	0040	0342	
@DOLAR	001	005B	0068	
@DOP2	001	0004	0028	
@DPLNG	001	0006	0131	
@DPOS	001	0000	0132	
@DPUT	001	0002	0134	2551
@DREAD	001	0001	0234	
@DSAD	001	0002	0126	
@DSBCY	001	0004	0105	
@DSBSY	001	0092	0338	
@DSCS1	001	0000	0106	
@DSEEK	001	0000	0233	
@DSIVF	001	0003	0137	
@DSPIN	001	0002	0130	
@DTRSZ	001	0018	0085	
@DUNSF	001	0080	0269	
@DVBCY	001	0007	0107	2552
@DVERY	001	0003	0239	
@DVRFY	001	0031	0135	
@DVST1	001	0002	0245	
@DVST2	001	0003	0246	
@DWAIT	001	00FF	0136	
@DWBCY	001	0005	0102	
@DWBIT	001	0002	0235	
@DWSIZ	001	00C0	0104	
@DWTB1	001	0003	0103	
@DZERO	001	00F0	0064	
@D1	001	0002	0026	

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
@EOF	001	001C	0077	
@EOFTC	001	0075	0160	
@EOS	001	001E	0076	2331 2417 2420 2539 2731
@ER37B	001	00F0	0359	
@FDDBC	001	0000	0193	
@FDE1	001	000C	0198	
@FDFNA	001	000B	0196	
@FDHLN	001	0002	0206	
@FDLNC	001	0002	0191	
@FDNSC	001	0003	0208	
@FDSD	001	0000	0204	
@FLACE	001	0009	0195	
@FLDBC	001	0001	0194	
@FLDIN	001	0012	0332	
@FLENT	001	0004	0199	
@FLFNA	001	0002	0197	
@FLHLN	001	0002	0207	
@FLLNC	001	0002	0192	
@FLNSC	001	0001	0209	
@FLSD	001	0001	0205	
@HDRLN	001	0007	0092	0854
@HSTAD	001	0009	0256	
@HSTEN	001	0007	0255	
@HSTPE	001	0006	0254	
@HSTQR	001	0001	0252	
@HSTSN	001	0005	0253	
@HSTVI	001	000F	0257	
@IAR	001	0010	0017	
@ID37B	001	0040	0395	
@INDEX	001	0001	0154	0155
@INST3	001	0003	0032	
@INST4	001	0004	0033	
@INST5	001	0005	0034	
@INST6	001	0006	0035	
@IP37B	001	00C0	0394	
@I1IAR	001	00C0	0020	
@KCMDK	001	0020	0306	
@KELOK	001	001B	0305	
@KENAB	001	001E	0303	
@KEXIT	001	001F	0304	
@KEYBD	001	0010	0323	
@KFUNK	001	0010	0326	
@KHARD	001	0011	0331	
@KLEAR	001	000D	0327	
@LINSZ	001	00F4	0084	0828
@LO37B	001	00F0	0363	
@MAPEN	001	0005	0089	
@MINCR	001	2000	0083	
@MINUS	001	0060	0080	
@NOP	001	0080	0040	
@NORFL	001	0000	0251	
@NTRDY	001	00A0	0387	
@NUMBR	001	007B	0070	
@OPD2	001	0004	0029	
@OP1	001	0003	0027	2389* 2501* 2525* 2526* 2718*
@OP2	001	0005	0031	

CROSS REFERENCE

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SYMBOL LEN VALUE DEFN REFERENCES

@OVRUN 001 0004 0281
 @PBUSY 001 00E2 0293
 @PCAR 001 00E6 0290
 @PCNT 001 0003 0225
 @PCTRL 001 0000 0147
 @PCYL 001 0001 0223
 @PC37B 001 00F2 0379
 @PDAR 001 00E4 0289
 @PDATA 001 0003 0149
 @PD37B 001 0080 0393
 @PERR 001 00E0 0296
 @PFLAG 001 0000 0222
 @PFORM 001 00E1 0294
 @PGCSZ 001 0020 0082
 @PLITE 001 00E2 0295
 @PLNGH 001 0004 0286
 @PMGCK 001 0020 0297
 @PN37B 001 00F0 0378
 @PPLNG 001 0004 0146
 @PRCNT 001 0001 0148
 @PRETR 001 00C0 0152
 @PRINT 001 0040 0150
 @PRITY 001 0080 0330
 @PSAD 001 0002 0224
 @PSIOQ 001 00E0 0292
 @PSIOR 001 0000 0291
 @PSNSQ 001 00E2 0298
 @PSR 001 0004 0015
 @PWAIT 001 00FF 0156
 @P1IAR 001 0020 0018
 @P2IAR 001 0040 0019
 @Q 001 0001 0024
 @RD37B 001 00F1 0373
 @REGL 001 0002 0012
 @RETRN 001 0080 0151
 @RLDWN 001 004F 0157
 @RTCNT 001 0003 0288
 @RTRNC 001 0080 0159
 @RT37B 001 0005 0386
 @SBLNL 001 0002 0182
 @SCTSZ 001 0100 0099
 @SDFLN 001 0007 0090
 @SDF0 001 0000 0164
 @SDF1 001 0001 0165
 @SDF2 001 0002 0166
 @SDF3 001 0003 0167
 @SDLN 001 0005 0168
 @SECCY 001 0030 0086
 @SIST 001 0001 0179
 @SKCTL 001 0000 0238
 @SLASH 001 0061 0067
 @SLAST 001 0002 0181
 @SMIDL 001 0003 0180
 @SNSB0 001 0000 0262
 @SNSB1 001 0001 0263
 @SNSB2 001 0002 0264

0083

0152

2737

0152

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
@SNSB3	001	0003	0265	
@SNULL	001	0080	0171	
@SN37B	001	00F2	0367	
@SONLY	001	0000	0178	
@SPINA	001	00A0	0247	
@SPINB	001	00B0	0248	
@STEXT	001	0007	0170	
@STYPE	001	0006	0169	
@SYCNT	001	0002	0287	
@SYLVL	001	0004	1105	
@TBCNT	001	0000	0158	
@TBLEF	001	0010	0153	0155
@TBLIX	001	0011	0155	
@TJ37B	001	0040	0384	
@TYPAM	001	0002	0329	
@TYPO	001	001C	0328	
@UCB	001	0087	0039	2715 2726
@UPARW	001	005A	0078	
@VADDR	001	0002	0140	
@VENTA	001	0056	0112	
@VMDDV	001	00FE	0113	
@VMFD1	001	0000	0108	
@VMFD2	001	0001	0109	
@VMRS3	001	0002	0111	
@VMTRL	001	0001	0110	
@VOLID	001	0006	0091	
@VQ	001	0001	0025	
@WA37B	001	00FF	0392	
@WSFIT	001	0500	0100	
@WSTBL	001	0503	0101	
@XR	001	0002	0014	2314* 2315* 2316 2321 2327 2327* 2331 2336* 2375 2375* 2389 2397 2400 2406 2406* 2413 2413* 2417 2420 2424* 2444 2447 2447* 2450 2450* 2452 2454 2456 2458 2458* 2460 2462 2462* 2465 2470 2470* 2471 2471* 2474* 2475 2475* 2478 2478* 2480 2482 2486 2486* 2490* 2502 2504 2506 2508 2526 2527 2531 2531* 2532 2535 2535* 2536 2539 2541* 2542 2542* 2545 2719 2722 2722* 2723 2725 2728 2728* 2729 2731 2733
@ZERO	001	0000	0062	2310 2316 2321 2331 2336 2417 2420 2452 2454 2456 2460 2480 2482 2502 2504 2506 2508 2536 2539 2545
@4K	001	0010	0346	
B\$PTBF	001	1F00	2187	2578
KRUALL	003	0E95	2596	2397
KRUAL1	001	00C1	2606	2502
KRUAL2	001	00EA	2607	2504
KRUATT	001	007C	2613	2454
KRUBRC	001	004D	2611	2460
KRUCOM	001	0068	2615	2482
KRUCPL	001	0E6D	2559	2365
KRUCSO	002	0E80	2583	2315 2474 2490
KRUDOL	001	005B	2610	2452
KRUEDT	001	0E73	2566	2371
KRUFLG	001	0080	2617	2354 2459 2472 2484 2489
KRUFLW	004	0E99	2598	2400
KRUFOR	001	0004	2621	
KRUIDR	001	06FF	2618	2310* 2318* 2323* 2354* 2356 2376* 2382* 2403 2405* 2408 2412* 2422 2431 2442 2446* 2459* 2472* 2484 2489* 2530*

CROSS REFERENCE

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
KRUKET	001	005D	2612	2480 2510
KRULGO	001	0E81	2587	2316
KRULG1	001	0E84	2589	2316 2321
KRULG2	001	0E88	2591	2321 2527 2527 2531
KRULG3	001	0E8D	2593	2527 2527 2531 2532 2532 2535
KRULG4	001	0E93	2595	2397 2397 2413 2532 2532 2535
KRULG5	001	0E96	2597	2397 2397 2400 2400 2406 2413
KRULG6	001	0E9A	2599	2400 2400 2406 2465 2465
KRULG7	001	0E9C	2602	2465 2465
KRULNG	005	0E8C	2592	2527
KRUNIT	001	0C07	2306	
KRUNU1	001	00EF	2608	2508
KRUNU2	001	00F9	2609	2506
KRUONE	001	0001	2619	2327 2355 2356 2375 2447 2450 2458 2462 2470 2471 2478 2486 2542 2554
KRUPIM	001	0E79	2574	2362
KRUPND	001	007B	2614	2456
KRURUN	003	0E83	2588	2316
KRUSHT	006	0E92	2594	2532
KRUSRT	002	0E6C	2555	2445
KRUSTP	004	0E87	2590	2321
KRUTWO	001	0002	2620	2475
KRUVAR	002	0E9B	2600	2465 2510
KRUVMM	001	0E67	2551	2308 2309 2437
KRU100	004	0C0B	2308	
KRU110	004	0C13	2314	
KRU120	004	0C28	2321	2317
KRU130	003	0C33	2327	2319
KRU140	004	0C3D	2330	
KRU145	003	0C47	2336	2329 2383 2438
KRU146	004	0C58	2341	2338
KRU148	004	0C66	2346	2342
KRU150	004	0C74	2350	2347
KRU155	004	0C7F	2353	2340 2345 2349
KRU160	004	0C83	2354	2351
KRU170	004	0C9F	2369	2332
KRU180	003	0CA9	2375	2322
KRU185	004	0CBF	2384	2425
KRU190	004	0CC7	2386	2381
KRU195	004	0CCB	2387	2418
KRU196	004	0CD9	2391	2388 2426
KRU197	004	0CE1	2397	2390
KRU200	004	0CEF	2403	
KRU210	004	0CF7	2405	
KRU220	003	0CFB	2406	
KRU230	004	0D01	2408	2399
KRU235	004	0D08	2410	2404
KRU240	004	0D10	2412	2409
KRU250	004	0D17	2414	2407 2473
KRU260	003	0D29	2420	2416
KRU265	004	0D36	2424	2389*
KRU267	004	0D3E	2426	2423
KRU270	004	0D42	2431	2421
KRU280	004	0D4F	2438	2432
KRU290	004	0D53	2442	2402
KRU300	003	0D68	2447	2443

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SYMBOL	LEN	VALUE	DEFN	REFERENCES
KRU310	003	0D78	2452	2449
KRU315	003	0D8A	2458	2453 2455
KRU320	003	0D91	2460	2457
KRU322	004	0DA8	2468	2483 2485 2488
KRU323	003	0DB0	2470	2467
KRU325	003	0DB3	2471	2481
KRU330	004	0DB6	2472	2461
KRU335	004	0DBA	2473	2451
KRU337	003	0DBE	2474	2464
KRU340	003	0DC1	2475	2491
KRU345	004	0DC4	2476	2479
KRU350	003	0DD2	2480	2477
KRU400	001	0DFE	2500	2387 2448 2463 2476 2487
KRU420	003	0E0E	2506	
KRU430	003	0E1A	2510	2503 2507
KRU440	004	0E1D	2511	2501* 2505 2509
KRU500	001	0E21	2524	2328 2380
KRU510	004	0E37	2532	2529
KRU520	003	0E3E	2535	
KRU530	003	0E41	2536	2534
KRU533	004	0E51	2541	2526*
KRU535	004	0E58	2543	
KRU536	004	0E5C	2544	
KRU540	003	0E60	2545	2540
KRU550	004	0E63	2546	2525* 2537
SCACNT	002	0EDC	2743	2733* 2734*
SCACOF	001	0087	2715	
SCACOM	001	0001	2714	2414
SCAINC	001	0001	2713	2722 2728
SCAMMA	003	0EB9	2737	2414*
SCANIT	001	0E9C	2717	2330 2386 2415 2538
SCASVE	002	0EDA	2742	2719* 2734
SCASV1	001	0ED9	2741	
SCA100	003	0EAB	2722	2724
SCA200	003	0EAE	2723	2721
SCA250	003	0EB8	2726	2737
SCA300	003	0EBB	2728	2730
SCA400	004	0ECB	2733	2726
SCA500	004	0ED5	2736	2718* 2732

TOTAL STATEMENTS IN ERROR IN THIS ASSEMBLY = 0

OL105 I THE CODE LENGTH OF #KRUNI IS 3840 DECIMAL.
 OL103 I TOTAL NUMBER OF LIBRARY SECTORS REQUIRED IS 4
 NAME-#KRUNI,PACK-R1R1R1,UNIT-R1,RETAIN-P,LIBRARY-R,CATEGORY-000

START ADDRESS	CATEGORY	NAME AND ENTRY	CODE HEXADECIMAL	LENGTH DECIMAL
0C00	0	#KRUNI	0F00	3840
OL100	I	THE TOTAL CORE USED BY #KRUNI IS 3840 DECIMAL.		
OL101	I	THE START CONTROL ADDRESS OF THIS MODULE IS 0C00.		
OL104	I	TOTAL NUMBER OF LIBRARY SECTORS REQUIRED IS 16		
		NAME-#KRUNI,PACK-R1R1R1,UNIT-R1,RETAIN-P,LIBRARY-O		