

File: RPGDEF.REQ, Edit:LPT1015

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FACILITY: VAX RPG II

ABSTRACT:

This is a common definition file for VAX RPG II. All definitions of data structures that must be known by the compiler and the generated code and RTL support should be included here. This file should be required in COMLIB.REQ.

ENVIRONMENT: VAX/VMS user mode

AUTHOR: D. Braffitt, CREATION DATE: 12-Nov-1982

MODIFIED BY:

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|-------|--|-----------------|
| 1-001 | Original | DJB 12-Nov-1983 |
| 1-002 | Add RPG\$L_CTX_ERROR | LPT 14-Feb-1983 |
| 1-003 | Add program control block macros | LPT 18-Mar-1983 |
| 1-004 | Add RPG\$K_ERR_SUBSC | LPT 24-Mar-1983 |
| 1-005 | Add support for record control/sequence check blocks; add RPG\$IOEXCEPTION error location constants; add current CTX area ID | DJB 11-Apr-1983 |
| 1-006 | RPG\$S_CTX_PRINTER should be 32. | DJB 12-Apr-1983 |
| 1-007 | Add RPG\$V_CTX_RNF. | DJB 14-Apr-1983 |
| 1-008 | Change RPG\$A_RCB_EXTFL to RPG\$A_RCB_EXTFLD | LPT 25-Apr-1983 |
| 1-009 | Add RPG\$V_RCB_MATCH | LPT 10-Jun-1983 |
| 1-010 | Fix offset of some RCB fields | LPT 10-Jun-1983 |

1-011	Add RPGSV_RCB_CNTRLF	LPT 22-Jun-1983
1-012	Add RPGSV_CTX_OVPEND	LPT 5-Jul-1983
1-013	Correct PRINTER context area offsets	DJB 05-Jul-1983
1-014	Add RPGSB_SCB_FLAGS	DJB 20-Jul-1983
1-015	Delete RPGSA_CTX_MATCHAREA	LPT 21-Nov-1983

Definitions for the RPG II file context area.
This area is allocated in PSECT \$LOCAL by the compiler
for each file immediately preceding the RAB. The actual size allocated
depends on the file type.

MACRO

RPGSW_CTX_FLAGS=	-4,0,16,0 %	Flag bits
RPGSV_CTX_UOFF=	-4,0,1,0 %	TRUE only if file is conditioned by an external indicator which is off
RPGSV_CTX_EOF=	-4,1,1,0 %	TRUE only if file is at end of file
RPGSV_CTX_LOOKAH=	-4,2,1,0 %	TRUE only if file is an input file which contains look-ahead fields
RPGSV_CTX_RNF=	-4,3,1,0 %	TRUE only if last attempt to read from file resulted in record not found
RPGSB_CTX_ID=	-1,0,8,0 %	Version number
RPGSL_CTX_ERROR=	-8,0,32,0 %	Error number for RPG detected errors
RPGSA_CTX_SCB=	-12,0,32,0 %	Address of current entry in the sequence control block
RPGSA_CTX_READ=	-16,0,32,0 %	Address of the READ routine
RPGSA_CTX_CRCB=	-20,0,32,0 %	Address of the current record control block
RPGSA_CTX_OVIND=	-12,0,32,0 %	Address of the overflow indicator for this PRINTER file
RPGSW_CTX_FL=	-14,0,16,0 %	# of lines on logical page (1-112)
RPGSW_CTX_OL=	-16,0,16,0 %	Overflow line # (1-112)
RPGSW_CTX_LINE=	-18,0,16,0 %	Current line on printed page
RPGSW_CTX_PFLAGS=	-20,0,16,0 %	Flags for print control
RPGSV_CTX_FIRST=	-20,0,1,0 %	TRUE only before first write to file
RPGSV_CTX_IPFORMS=	-20,1,1,0 %	TRUE only if first page forms positioning has been requested
RPGSV_CTX_OVLINE=	-20,2,1,0 %	TRUE if this is an overflow line
RPGSV_CTX_OVPEND=	-20,3,1,0 %	TRUE if overflow is pending
RPGSW_CTX_SKIPB=	-22,0,16,0 %	# of lines to space before printing (0-3)
RPGSW_CTX_SKIPA=	-24,0,16,0 %	# of lines to space after printing (0-3)
RPGSW_CTX_SPACEB=	-26,0,16,0 %	Line number to skip to before printing (1-112)
RPGSW_CTX_SPACEA=	-28,0,16,0 %	Line number to skip after printing (1-112)

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RPGSK_CTX_ID=	1,	Current CTX area id
RPGSS_CTX_OUTPUT=	8,	Size of context area for output files
RPGSS_CTX_PRINTER=	28,	Size of context area for printer files
RPGSS_CTX_INPUPD=	20;	Size of context area for input and update files

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!+
! Definitions for the RPGII file record control and sequence check blocks.
! This area is allocated in PSECT $LCCAL by the compiler
! for each input and update file immediately following the record buffer.
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MACRO

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RPG$A_RCB_RECID=      0,0,32,0 %  ! Addr of record identifying indicator
RPG$A_RCB_EXTFLD=     4,0,32,0 %  ! Addr of extract field routine
RPG$A_RCB_MATCH_RTN=  8,0,32,0 %  ! Addr of match field compare and
                                ! extract code
RPG$A_RCB_CFR=       12,0,32,0 %  ! Addr of control field compare routine
RPG$W_RCB_FLAGS=     16,0,16,0 %  ! Record control block flag bits
RPG$V_RCB_SEQ=       16,0,1,0 %   ! TRUE if record type is seq checked
RPG$V_RCB_MATCH=     16,1,1,0 %   ! TRUE if record type has match fields
RPG$V_RCB_CNTRLF=    16,2,1,0 %   ! TRUE if record type has control fields

RPG$A_SCB_RCB=       0,0,32,0 %  ! Address of the RCB of the record which
                                ! is the current record in the sequence
RPG$B_SCB_FLAGS=     4,0,8,0 %   ! Sequence control block flag bits
RPG$V_SCB_OPT=       4,0,1,0 %   ! TRUE if record type is optional
RPG$V_SCB_NO=        4,1,1,0 %   ! TRUE if more than one of this record
                                ! type may be present
RPG$V_SCB_1SEEN=     4,2,1,0 %   ! TRUE if one of the current record type
                                ! has been seend
RPG$V_SCB_LAST=      4,3,1,0 %   ! TRUE if this is the end of the table
                                ! and RPG$A_SCB_RCB contains the
                                ! address of the 1st element in the SCB

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RPG$$RCB=            18,         ! Size of record control block
RPG$$SCB=             5,         ! Size of sequence check block

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!+
! Definitions for RPG error handling.
! The address of the program control block is found in RPG$A_PCB
! which is found offset from the frame pointer.
! For version 1, the only field in the program control block
! is the internal version number.
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MACRO
  RPG$A_PCB=          -4,0,32,0 %  ! Address of program control block
  RPG$B_PCB_ID=      0,0,8,0 %  ! Version number
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! Definitions of first parameter to RPG$IOEXCEPTION to describe where
! to find IO error.
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  RPG$K_ERR_RAB=      1,          ! Condition value in RAB field
  RPG$K_ERR_FAB=      2,          ! Condition value in FAB field
  RPG$K_ERR_FILE_CNTXT= 3,        ! Condition value in file context area
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!+
! Definition of literal for error passed to RPG$ERROR
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  RPG$K_ERR_SUBSC=    5,          ! Same as COBOL for now
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