160-163,176,177 INSTRUCTIONS   CP6   CP7   CP8   CP9   CP10   CP11

IOTA 3-BIT ADDS

VECTOR REGISTERS
DATA Vi

ADDER
RESULT

OAA
• •
ODP   (64)

VR's VIA VB

SELECT RESULT
BY 4-BIT GROUPS

RESULT ASSUMING
CARRY INTO
4-BIT GROUP

HBA
• •
HPD

RESULT ASSUMING
NO CARRY INTO
4-BIT GROUP

GAA
• •
GPD

SECTION
CARRIES

KAB
• •
KCD

PAB
• •
PDD

CARRY
INTO GROUP

MAA
• •
MDC

SECTION
ENABLES

LBC
• •
LCD

ENABLES
INTO GROUP

NBA
• •
NDC

CARRY WITHIN
GROUP ASSUMING
CARRY INTO
4-BIT GROUP

DBB
• •
DPD

BIT ENABLES

EAA
• •
EPD

CARRY WITHIN
GROUP ASSUM-
ING NO
CARRY INTO
4-BIT GROUP

CAA
• •
CDP

GROUP ENABLES

FAB
• •
FBO

RECIRCULATION   LOGICAL
PRODUCTS

AAA
• •
APD

LOGICAL
SUMS

BAA
• •
BPD

WAA
• •
WPD

VECTOR REGISTER DATA
Vj FOR ADDER

IAA-IDP
VR's (64)

SCALAR REGISTER DATA
Sk FOR IOTA STRIDE

IEA-IIIP
VR's (64)

SAA
• •
SPD

SCALAR REGISTER DATA
Sj FOR ADDER

IEA-IIIP
VR's (64)

SAA
• •
SPD

SAA
• •
SPD

SCALAR REGISTER DATA
Sj FOR IOTA MASK

IEA-IIIP
VR's (64)

UAA
• •
UPE

UAA
• •
UPE

VECTOR REGISTER DATA
Vk FOR ADDER

IEA-IIIP
VR's (64)

VECTOR INTEGER ADD INSTRUCTION SUMMARY

160ijk	ENTER Vi WITH INTEGER SUM Sj + Vk
161ijk	ENTER Vi WITH INTEGER SUM Vj + Vk
162ijk	ENTER Vi WITH INTEGER DIFFERENCE Sj - Vk
163ijk	ENTER Vi WITH INTEGER DIFFERENCE Vj - Vk

VA MODULE ADDER RANKS (ADD, SUBTRACT)

B-2270A

3