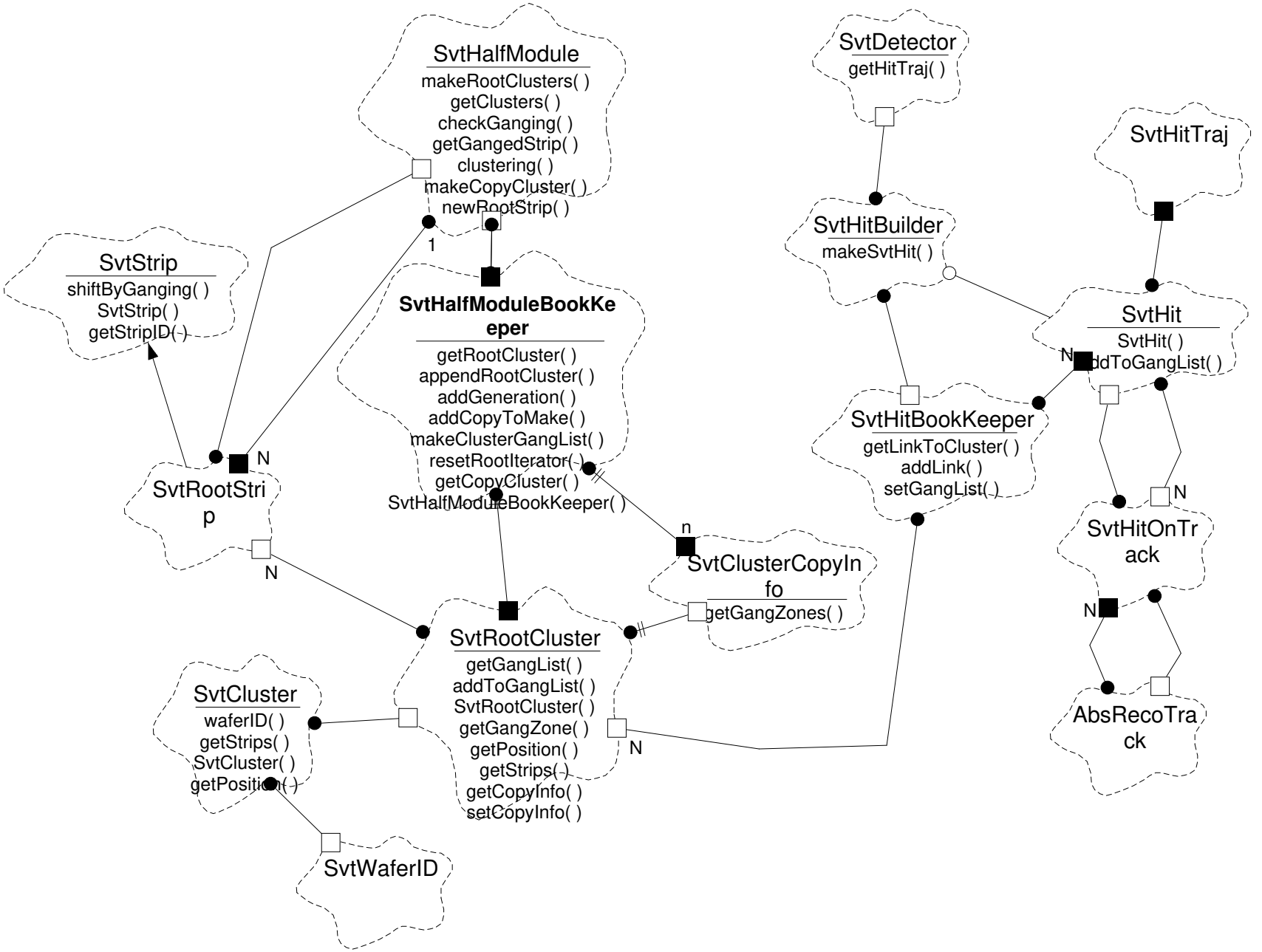
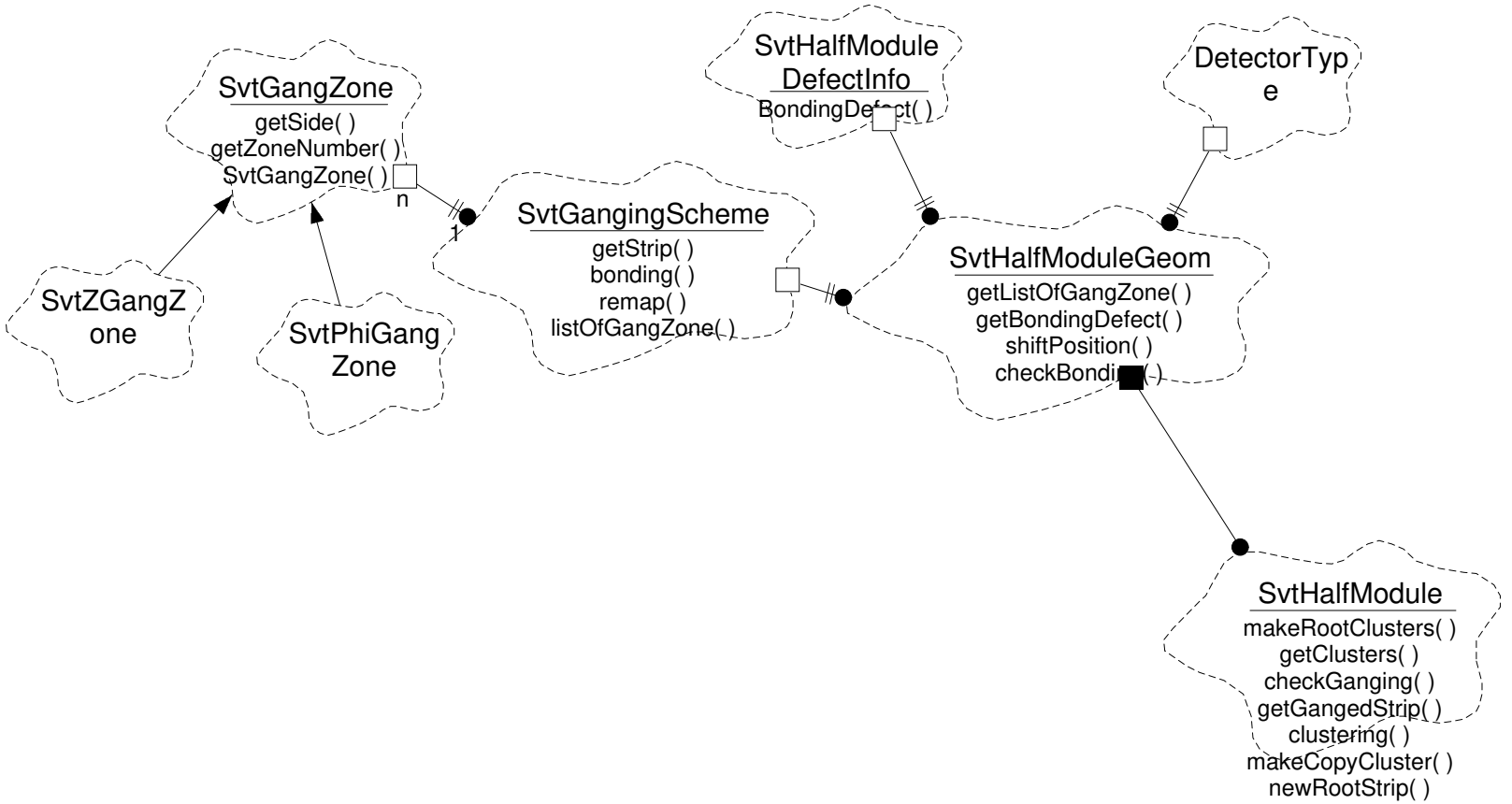
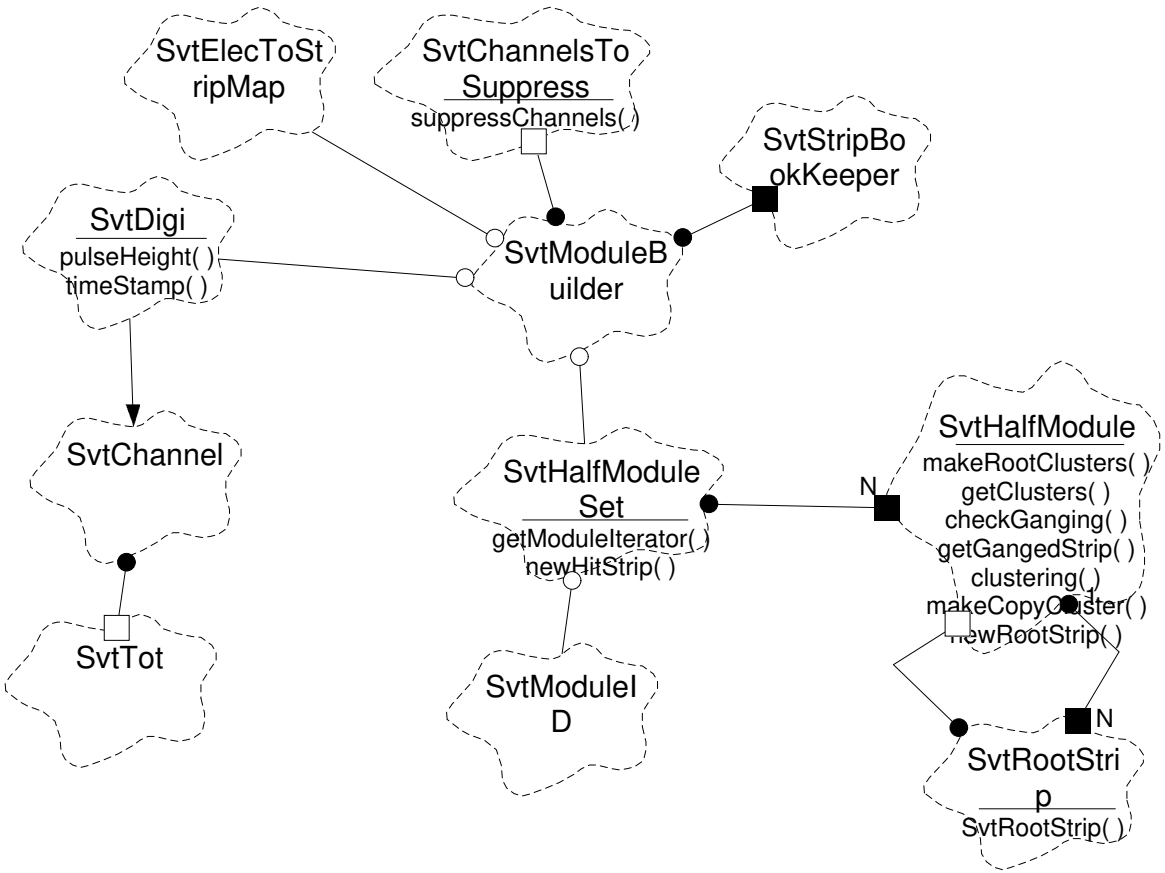
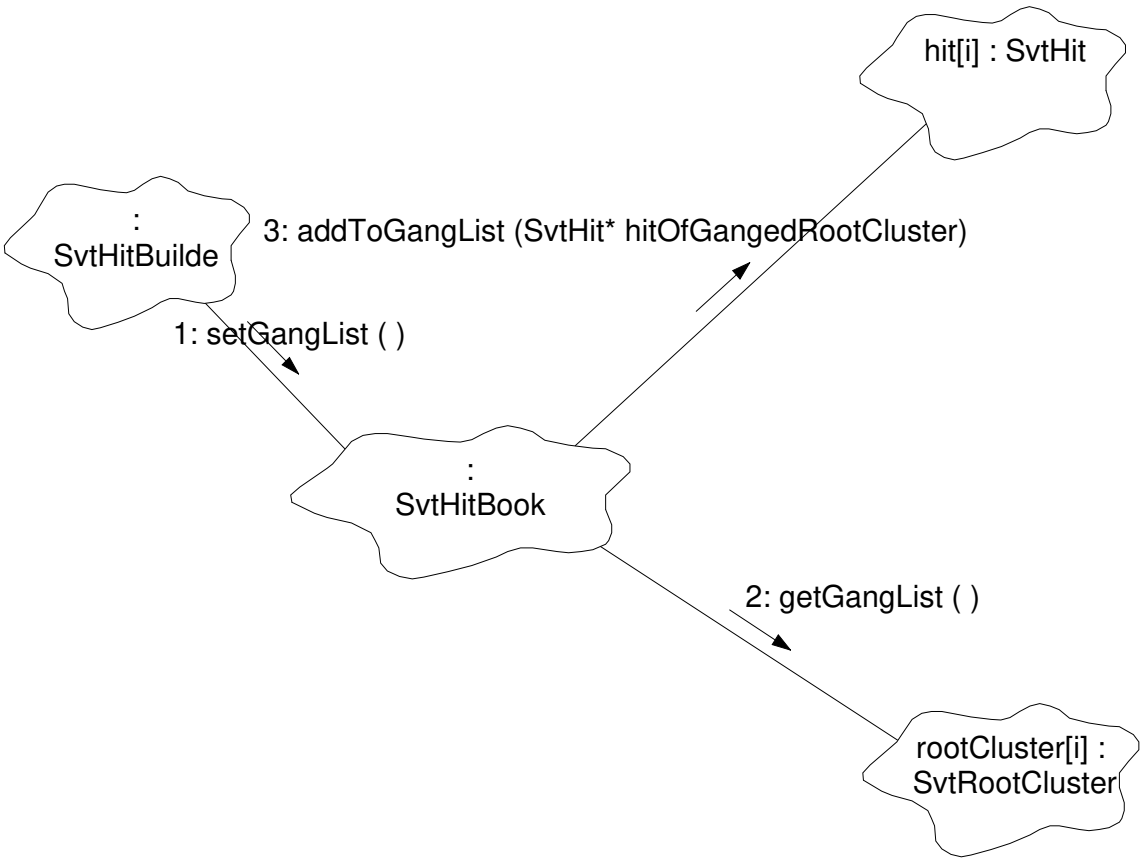
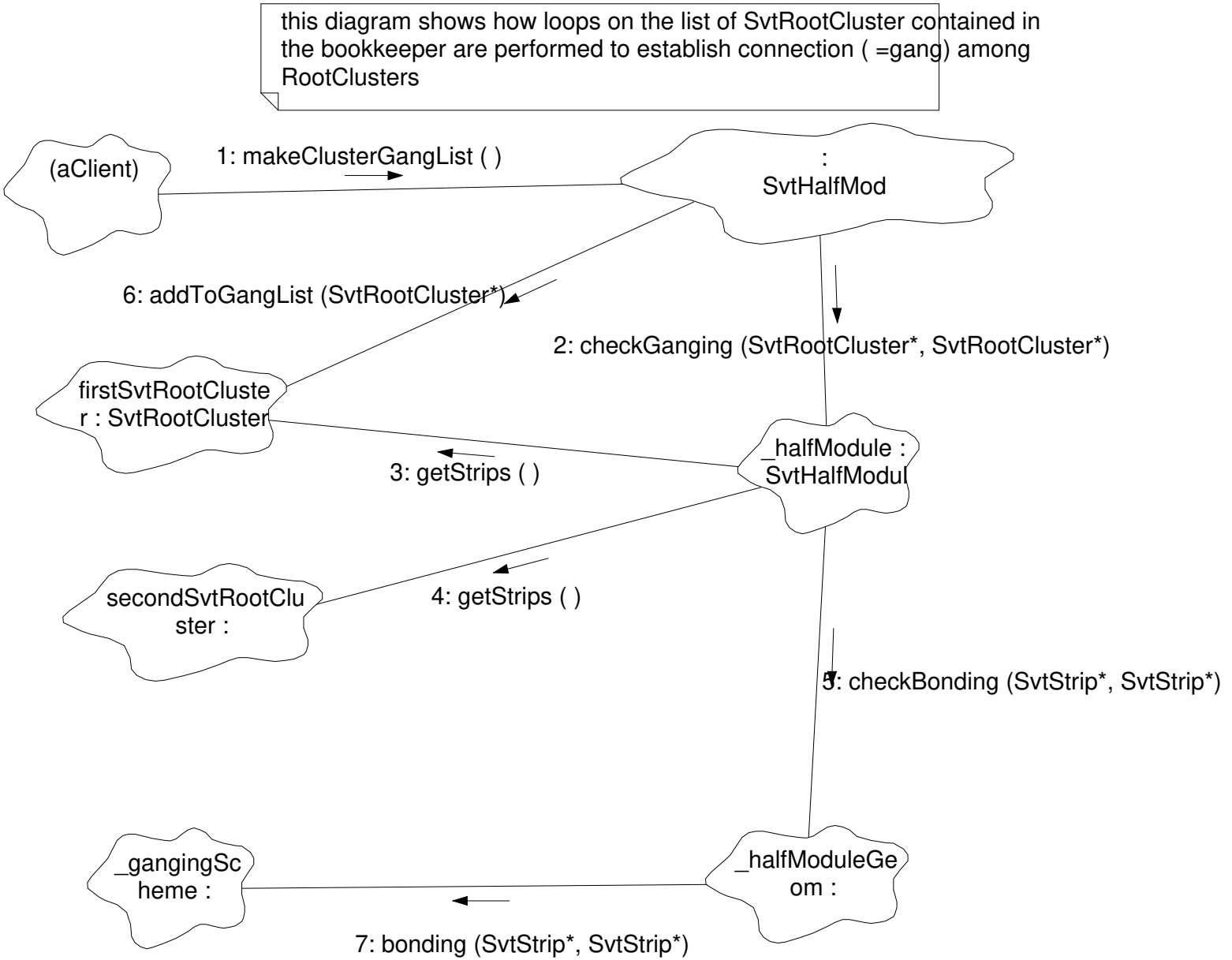

SvtHalfModule
makeRootClusters( )
getClusters( )
checkGanging( )
getGangedStrip( )
clustering( )
makeCopyCluster( )
newRootStrip( )
SvtDetector
getHitTraj( )
SvtHitTraj
SvtHitBuilder
makeSvtHit( )
SvtStrip
shiftByGanging( )
SvtStrip( )
getStripID( )
SvtHalfModuleBookKeeper
getRootCluster( )
appendRootCluster( )
addGeneration( )
addCopyToMake( )
makeClusterGangList( )
resetRootIterator( )
getCopyCluster( )
SvtHalfModuleBookKeeper( )
SvtHit
SvtHit( )
addToGangList( )
SvtHitBookKeeper
getLinkToCluster( )
addLink( )
setGangList( )
SvtRootStrip
SvtClusterCopyInfo
getGangZones( )
SvtHitOnTrack
SvtRootCluster
getGangList( )
addToGangList( )
SvtRootCluster( )
getGangZone( )
getPosition( )
getStrips( )
getCopyInfo( )
setCopyInfo( )
SvtCluster
waferID( )
getStrips( )
SvtCluster( )
getPosition( )
AbsRecoTrack
SvtWaferID
1
N
n

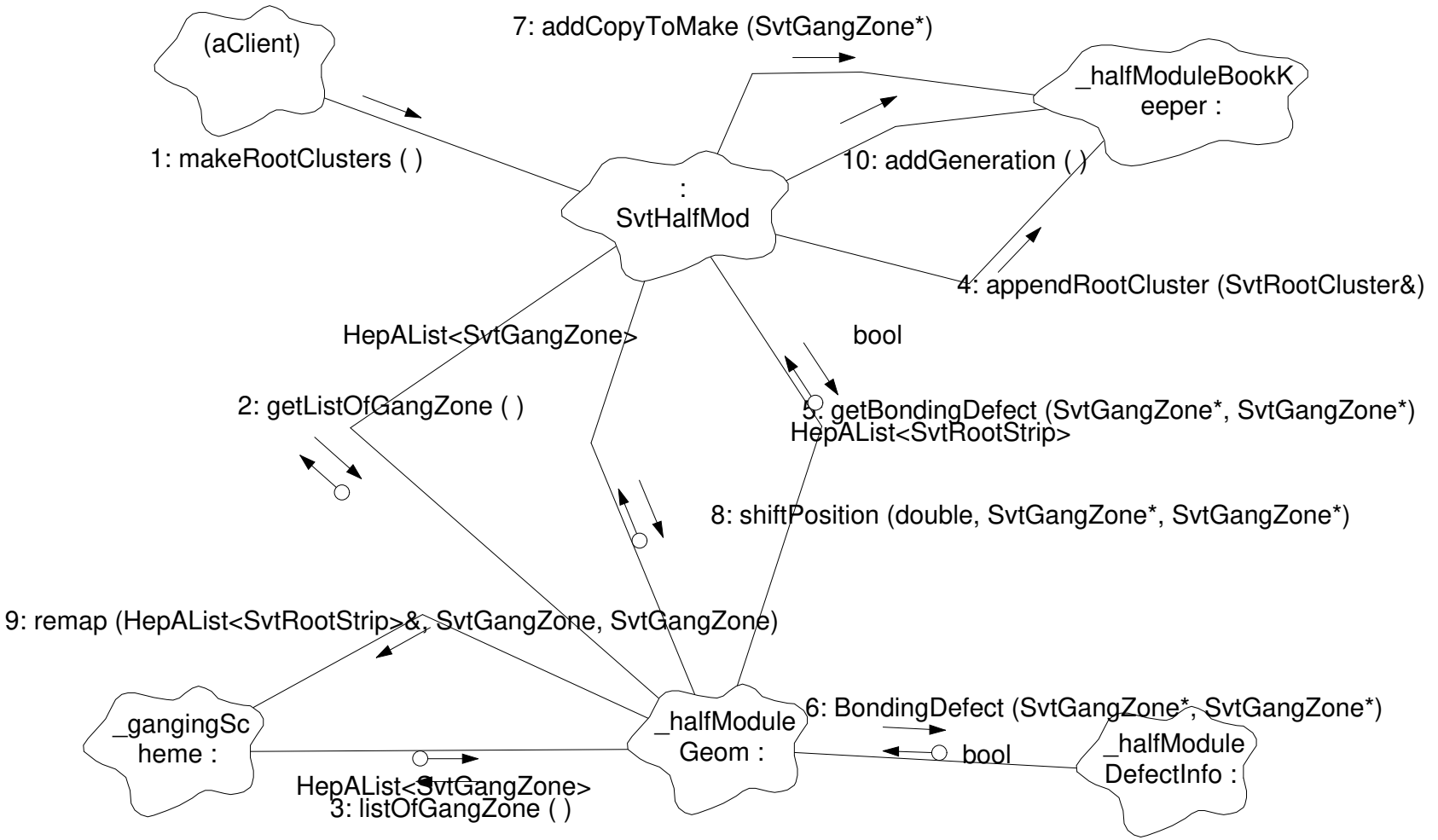

SvtGangZone
getSide( )
getZoneNumber( )
SvtGangZone( )
n
1
SvtHalfModule
DefectInfo
BondingDefect( )
DetectorTyp
e
SvtGangingScheme
getStrip( )
bonding( )
remap( )
listOfGangZone( )
SvtHalfModuleGeom
getListOfGangZone( )
getBondingDefect( )
shiftPosition( )
checkBondi( )
SvtZGangZ
one
SvtPhiGang
Zone
SvtHalfModule
makeRootClusters( )
getClusters( )
checkGanging( )
getGangedStrip( )
clustering( )
makeCopyCluster( )
newRootStrip( )

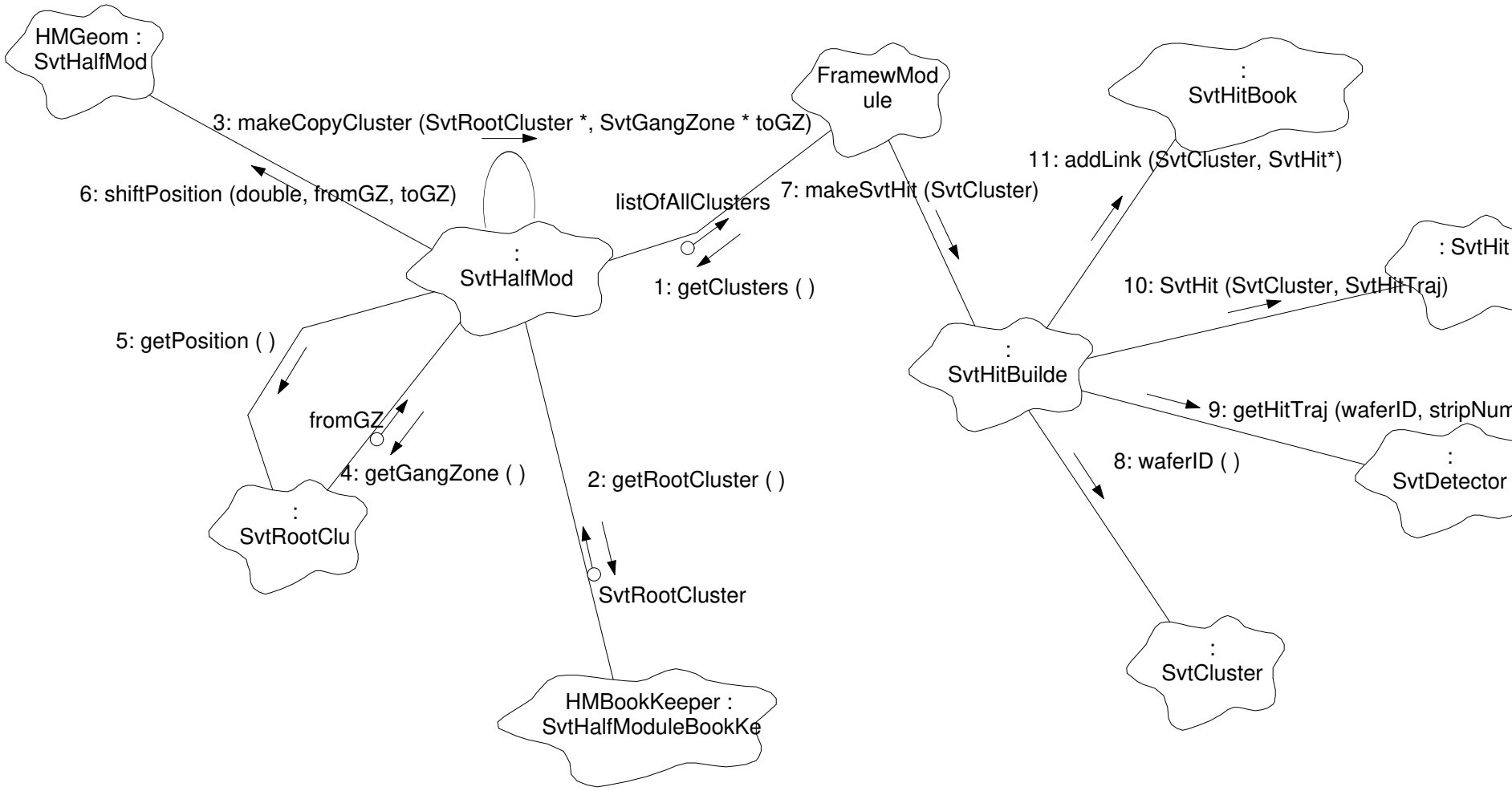

SvtElecToStripMap
SvtChannelsToSuppress
suppressChannels( )
SvtStripBookKeeper
SvtDigi
pulseHeight( )
timeStamp( )
SvtModuleBuilder
SvtChannel
SvtHalfModuleSet
getModuleIterator( )
newHitStrip( )
N
SvtHalfModule
makeRootClusters( )
getClusters( )
checkGanging( )
getGangedStrip( )
clustering( )
makeCopyCluster( )
newRootStrip( )
SvtTot
SvtModuleID
N
SvtRootStrip
SvtRootStrip( )


hit[i] : SvtHit
:
SvtHitBuilde
3: addToGangList (SvtHit* hitOfGangedRootCluster)
1: setGangList ( )
:
SvtHitBook
2: getGangList ( )
rootCluster[i] :
SvtRootCluster


this diagram shows how loops on the list of SvtRootCluster contained in the bookkeeper are performed to establish connection (=gang) among RootClusters
(aClient)
1: makeClusterGangList ( )
:
SvtHalfMod
6: addToGangList (SvtRootCluster*)
2: checkGanging (SvtRootCluster*, SvtRootCluster*)
firstSvtRootCluste
r : SvtRootCluster
3: getStrips ( )
_halfModule :
SvtHalfModul
secondSvtRootClu
ster :
4: getStrips ( )
5: checkBonding (SvtStrip*, SvtStrip*)
_gangingSc
heme :
_halfModuleGe
om :
7: bonding (SvtStrip*, SvtStrip*)

Every time SvtHalfModule checks the existence of bonding defects there two possibilities; – NO DEFECTS between the ganged zone ––––> addCopyToMake(), which means that the SvtRootCluster–s created will have to make a copy of theirselves in the next ganged zone; – BONDING DEFECTS ––––––> addGeneration(), which means that new SvtRootCluster–s are going to be created and copy counting must be re–inizialized




HMGeom :
SvtHalfMod
3: makeCopyCluster (SvtRootCluster *, SvtGangZone * toGZ)
6: shiftPosition (double, fromGZ, toGZ)
:
SvtHalfMod
listOfAllClusters
1: getClusters ( )
FramewMod
ule
7: makeSvtHit (SvtCluster)
:
SvtHitBook
11: addLink (SvtCluster, SvtHit*)
: SvtHit
10: SvtHit (SvtCluster, SvtHitTraj)
:
SvtHitBuilde
9: getHitTraj (waferID, stripNum
8: waferID ( )
:
SvtDetector
5: getPosition ( )
fromGZ
4: getGangZone ( )
:
SvtRootClu
2: getRootCluster ( )
SvtRootCluster
HMBookKeeper :
SvtHalfModuleBookKe
:
SvtCluster

(aClient)
See diagram "HitMaking" for the re−production of the copy cluster (message makeCopy and following msgs)
1: getLinkToCluster (SvtHit*)
SvtCluster
HitBookKeepe r :
2: getCopyCluster (SvtRootCluster *, SvtGangZone)
HMBookKee per :
3: makeCopyCluster (SvtRootCluster *, SvtGangZone *)
aHalfModule :
(a Client)
4: getStrips ( )
: SvtCluster
5: getStrips (SvtGangZon
Before asking the strips to shift it checks through CopyInfo that the specified gangZone is in the list
: SvtRootCluster
6: shiftByGanging (gangZ
: SvtRootStri