

Tabular Summary

Language Concept	Ada	CHILL	Java
DEFINITION			
definition of single actors	Yes	No	No
definition of actor types	Yes	Yes	Yes
CREATION			
implicit creation	Yes	Yes ¹⁾	No
explicit creation	Yes	Yes ²⁾	Yes
dynamic creation	Yes	Yes	Yes
START			
automatic start	Yes	Yes ²⁾	No
explicit start	No	Yes ¹⁾	Yes
SUSPENDING AND RESUMING			
asynchronous suspending	Yes	No	Yes
asynchronous resuming	Yes	No	Yes
EXPLICIT TERMINATION			
termination of itself	Yes	Yes ¹⁾	Yes
termination of other actors	Yes	No	Yes
EXECUTIONAL PART			
nesting of actors	Yes	Yes ²⁾	Yes
concurrency within an actor	No	No	Yes
DIRECT COMMUNICATION			
synchronous	Yes	No	No
asynchronous	No	Yes ²⁾	No
OBJECTS WITH COORDINATED ACCESS			
exclusive read-write access	Yes	Yes	Yes
concurrent read-only access	Yes	No	No
conditional operations	Yes	Yes	Yes
support of immediate resumption	Yes	No	No
predefined buffers	No	Yes	No
predefined events	No	Yes	No
predefined atomic variables	Yes	No	No
predefined semaphores	Yes	No	No
ELEMENTS FOR REALTIME PROGRAMMING			
priorities	Yes	No	Yes
clearly defined priority model	Yes	No	No
means to limit priority inversion	Yes	No	No
access to clock	Yes	Yes	Yes
delaying until some future time	Yes	Yes	No
timeouts	Yes	Yes	No
temporal arrangements	No	No	No
runtime estimation	No	No	No

¹⁾ only CHILL Processes

²⁾ only CHILL Tasks

