```
function [linearAccelCentroid] = vcDot_iplipl(omegaDot_iplipl,positionC_iipl, \( \vec{\vec{\vec{v}}} \)
omega_iplipl,vDot_iplipl)
% This function summarizes the linear acceleration of the centroid of joint from the
% previous link and the current link. Eqn. 6.48 in the textbook.
    arguments
        omegaDot_iplipl (3,1)
        positionC_iipl (3,1)
        omega_iplipl (3,1)
        vDot_iplipl (3,1)
    end

linearAccelCentroid = cross(omegaDot_iplipl,positionC_iipl)+cross(omega_iplipl, \( \vec{\vec{v}} \)
cross(omega_iplipl,positionC_iipl))+vDot_iplipl;
```

end