# getCPos

Get the calibrated position of the Herkulex motor

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### **Syntax**

```
CPos = getCPos(sObject,pID)
```

## **Description**

CPos = getCPos(sObject,pID) gets the calibrated position of the Herkulex motor.

- Formula: Calibrated Position = Absolute Position Calibrated Difference
- RAM register for calibrated position: 0x3A(58)

## **Input Arguments**

- sObject serial port object
- pID integer

## **Output Arguments**

CPos - integer

#### **Function Codes**

```
function CPos = getCPos(sObject,pID)

packet = pkGen(pID,04,'3A02'); % Calibrated position addr: 0x3A(58), read 2 bytes
data

inHkx(sObject,packet);

msg = outHkx(sObject);
```

```
% Byte in reverse order by Little Endian Order

% Position details are in 10 bits (refer to Herkulex Manual pg25)

tempPos = hexToBinaryVector(strcat(msg(21:22), msg(19:20)),16);

CPos = bi2de(tempPos(7:16),'left-msb');
end
```

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