AWS Industrial IoT
Predictive Quality Reference Architecture
Create a computer vision predictive quality machine learning (ML) model using Amazon SageMaker with AWS IoT Core, AWS IoT Greengrass and AWS Lake Formation.

1. Configure AWS IoT Greengrass to communicate with an industrial camera on the shop floor.
2. Send production data to AWS IoT Core and processed images to S3 in your AWS Lake Formation.
3. Configure rules within AWS IoT Core to trigger events and send messages to AWS IoT Analytics.
4. Build your predictive quality Machine Learning (ML) model with Amazon SageMaker based on images stored in AWS Lake Formation.
5. Deploy your Machine Learning model onto your AWS IoT Greengrass Edge Gateway.
6. Configure rules within AWS IoT Core to trigger events based on MQTT messages and ingest data into AWS IoT Analytics.
7. In AWS IoT Analytics create a container data set from incoming production data and link it to a processing Docker container.
8. Create a topic for quality alerts in Amazon Simple Notification Service and configure the trigger in your container. Visualize your analysis using Amazon QuickSight on the AWS IoT Analytics data source.