



Optical Character and Barcode Recognition

SiMa Value Proposition

- All-in-One Solution
- Multi-Language Capability
- Flexible for Product Variations
- Freedom of Camera Choice



Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per serving	
Calories	230
% Daily Value *	
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	20%
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Allergen Information: Contains milk, soy Made in a facility that processes eggs, peanuts	
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet.	

Lot No B6511ZT75Y2
BEST BY OCT 9 2025



SiMa's OCR solution transforms label inspection economics

Traditional machine vision costs \$15K–\$20K once cameras, lenses, lighting, and integration are added — plus ongoing re-tuning. SiMa delivers equal or better performance at less than a third of the cost, using commodity cameras instead of proprietary hardware.

- One platform for OCR + 1D/2D barcodes with 98%+ accuracy in 80+ languages.
- On-device inference for real-time results, no bandwidth costs, and built-in security.
- Adaptability to new SKUs or categories in minutes without ML retraining or line stoppages.
- Flexible optics to accommodate varied distance and character size, avoiding lock-in.
- Scalable architecture ready for advanced analytics and future labeling requirements.

Faster deployment, future-proof labeling compliance – all on a single MLSoC

Technical Details

Create scanning template in 15 minutes.

Inferences performed against template.

Recognizes characters and/or barcode utilizing state of the art ML models.

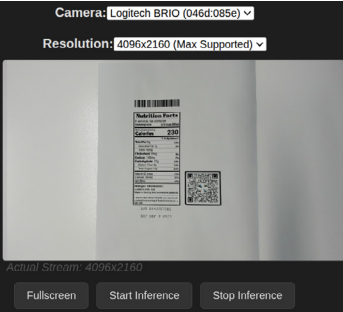
Allows rapid adaptation to new product codes.

Works with off-the-shelf cameras.

Does not mandate strict lighting or label distance.

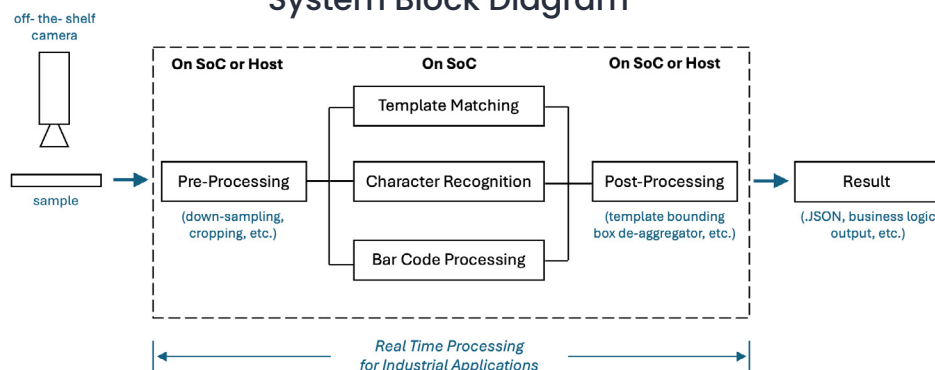
Insensitive to rotation angle.

Demo UI



Type	Box #	Expected	Recognized	Status
OCR	0	NutritionFacts	NutritionFacts	✓
OCR	1	EXPOCT92025	EXPSEP92025	✗
OCR	2	LOTB643PE75R2	LOTB643PE75R2	✓
OCR	3	AllergenInformation:	AllergenInformation:	✓
OCR	4	Calories	Calories	✓
OCR	5	230	230	✓
Barcode	0	https://public.modalix.info:4443/?language=select=1	https://public.modalix.info:4443/?language=select=1 (T: QRCode, Q: 0)	✓
Barcode	1	product-3827415	product-3827415 (T: Code128, Q: 0)	✓

System Block Diagram



Hardware

Our Silicon



Modalix

Our Boards



SoM



SoM Dev



PCIe HHHL

Software



Hugging Face huggingface.co/simaai

Model Zoo sima.ai/model-browser/



About SiMa

SiMa.ai is a leader in Physical AI, delivering a purpose-built, software-centric platform that brings best-in-class performance, power efficiency, and ease of use to Physical AI applications. Focused on scaling Physical AI across robotics, automotive, industrial automation, aerospace & defense, smart vision, and healthcare, SiMa.ai is led by seasoned technologists and backed by top-tier investors. Headquartered in San Jose, California.

Learn more at www.sima.ai.

